

1) Nuclear Double Beta Decay, Fundamental Particle Physics, Hot Dark Matter, And Dark Energy.

Hans V. Klapdor-Kleingrothaus, Irina V. Krivosheina, . Jun 2010. 29pp. [Temporary entry](#)  
e-Print: [arXiv:1006.2423](#) [hep-ph]

2) Seventy years of double beta decay: From nuclear physics to beyond-standard-model particle physics.

H.V. Klapdor-Kleingrothaus, (Heidelberg U.) . 2010. 1520pp.  
Hackensack, USA: World Scientific (2010) 1520 p.

3) Direct Search for Dark Matter - Striking the Balance - and the Future.

V.A. Bednyakov, (Dubna, JINR) , H.V. Klapdor-Kleingrothaus, (Heidelberg, Max Planck Inst.) . Mar 2008. 49pp.  
Published in **Phys.Part.Nucl.40:583-611,2009.**  
e-Print: [arXiv:0806.3917](#) [hep-ph]

4) New constraints on spin-dependent WIMP-neutron interactions from HDMS with natural Ge and Ge-73.

V.A. Bednyakov, (Dubna, JINR) , H.V. Klapdor-Kleingrothaus, (Heidelberg, Max Planck Inst.) , I.V. Krivosheina, (Nizhnii Novgorod, Radiophys. Res. Inst.) . 2008. 6pp.  
Published in **Phys.Atom.Nucl.71:111-116,2008.**

5) Lessons after the evidence for neutrinoless double beta decay: The next step.

H.V. Klapdor-Kleingrothaus, (Heidelberg, Max Planck Inst.) . 2008. 13pp.  
Published in **Int.J.Mod.Phys.E17:505-517,2008.**

6) Dark matter in astroparticle and particle physics. Proceedings, 6th International Heidelberg Conference, Sydney, Australia, September 24-28, 2007.

Hans Volker Klapdor-Kleingrothaus, (ed.), (Heidelberg, Max Planck Inst.) . 2008. 631pp.  
Published in Hackensack, USA: World Scientific (2008) 631 p

7) New constraints on spin-dependent WIMP-neutron interactions from HDMS with natural Ge and Ge-73.

H.V. Klapdor-Kleingrothaus, (Heidelberg U.) , I.V. Krivosheina, (Nizhnii Novgorod, Radiophys. Res. Inst.) , V.A. Bednyakov, (Dubna, JINR) . Sep 2007. 9pp.  
Published in \*Sydney 2007, Dark matter in astroparticle and particle physics\* 42-50

8) Dreams and reality of using naked Ge detectors in liquid nitrogen, status (long-term stability) of GENIUS-TF.

By Heidelberg-Moscow and GENIUS Collaborations (Irena V. Krivosheina *et al.*). Sep 2007. 8pp.  
Published in \*Sydney 2007, Dark matter in astroparticle and particle physics\* 87-94

9) Hot dark matter and neutrinoless double beta decay: World status of the field.

H.V. Klapdor-Kleingrothaus, (Heidelberg U.) . Sep 2007. 26pp.  
Published in \*Sydney 2007, Dark matter in astroparticle and particle physics\* 442-467

**10) A new experimental limit for the stability of the electron.**

H.V. Klapdor-Kleingrothaus, I.V. Krivosheina, I.V. Titkova, (Heidelberg, Max Planck Inst.) . 2007. 10pp.

Published in **Phys.Lett.B644:109-118,2007.**

**11) Theoretical investigation of the dependence of double beta decay tracks in a Ge detector on particle and nuclear physics parameters and separation from gamma ray events.**

H.V. Klapdor-Kleingrothaus, I.V. Krivosheina, (Heidelberg, Max Planck Inst.) , I.V. Titkova, (Dubna, JINR) . Jan 1, 2006. 20pp.

Published in **Phys.Rev.D73:013010,2006.**

**12) Particle and nuclear physics parameters: How do they affect the tracks of double beta events in a germanium detectors, and their separation from gamma events.**

H.V. Klapdor-Kleingrothaus, I.V. Krivosheina, I.V. Titkova, (Heidelberg, Max Planck Inst.) . 2006. Published in **Phys.Lett.B632:623-631,2006.**

**13) Theoretical description of double beta decay tracks in a germanium detector and of their dependence on particle and nuclear physics: A review.**

H.V. Klapdor-Kleingrothaus, I.V. Krivosheina, (Heidelberg, Max Planck Inst.) , I.V. Titkova, (Dubna, JINR) . 2006. 30pp.

Published in **Int.J.Mod.Phys.A21:1159-1188,2006.**

**14) Microscopic calculations of signals of double beta decay in a Ge-76 detector and first application to the Heidelberg-Moscow experiment.**

H.V. Klapdor-Kleingrothaus, I.V. Krivosheina, V. Mironov, I.V. Titkova, (Heidelberg, Max Planck Inst.) . 2006. 13pp.

Published in **Phys.Lett.B636:235-247,2006.**

**15) Theoretical investigation of pulse shapes of double beta events in a Ge-76 detector, their dependence on particle physics parameters, and their separability from background gamma events.**

H.V. Klapdor-Kleingrothaus, I.V. Krivosheina, (Heidelberg, Max Planck Inst.) , I.V. Titkova, (Dubna, JINR) . 2006. 22pp.

Published in **Mod.Phys.Lett.A21:1257-1278,2006.**

**16) The evidence for the observation of 0nu beta beta decay: The identification of 0nu beta beta events from the full spectra.**

H.V. Klapdor-Kleingrothaus, I.V. Krivosheina, (Heidelberg, Max Planck Inst.) . 2006. 20pp.

Published in **Mod.Phys.Lett.A21:1547-1566,2006.**

**17) Lessons after the evidence for 0nu beta beta decay.**

H.V. Klapdor-Kleingrothaus, (Heidelberg, Max Planck Inst.) . 2006. 3pp.

Prepared for 2nd Scandanavian Neutrino Workshop (SNOW 2006), Stockholm, Sweden, 2-6 May 2006.

Published in **Phys.Scripta T127:40-42,2006.**

**18) Lessons after 3 years of running GENIUS-TF in Gran Sasso.**

By Heidelberg-Moscow and GENIUS Collaborations ([I.V. Krivosheina et al.](#)). 2006. 2pp.

Prepared for 2nd Scandanavian Neutrino Workshop (SNOW 2006), Stockholm, Sweden, 2-6 May 2006.

Published in **Phys.Scripta T127:52-53,2006**.

**19) Status of GENIUS-TF-II and TF-III: The long-term stability of naked detectors in liquid nitrogen.**

[H.V. Klapdor-Kleingrothaus, I.V. Krivosheina, \(Heidelberg, Max Planck Inst.\)](#). 2006. 5pp.

Published in **Nucl.Instrum.Meth.A566:472-476,2006**.

**20) On the mixed spin-scalar coupling approach in dark matter search.**

[V.A. Bednyakov, \(Dubna, JINR\) , H.V. Klapdor-Kleingrothaus, \(Heidelberg, Max Planck Inst.\)](#) .

Apr 2005. 15pp.

Contributed to DARK 2004: 5th International Heidelberg Conference on Dark Matter in Astro and Particle Physics, College Station, Texas, 3-9 Oct 2004.

e-Print: [hep-ph/0504031](#)

**21) First evidence for neutrinoless doubly beta decay: And world status of double beta experiments.**

[Hans Volker Klapdor-Kleingrothaus, \(Heidelberg, Max Planck Inst.\)](#) . Feb 2005. 23pp.

Prepared for 11th International Workshop on Neutrino Telescopes, Venice, Italy, 22-25 Feb 2005.

Published in \*Venice 2005, Neutrino telescopes\* 215-237

e-Print: [hep-ph/0512263](#)

**22) First evidence for neutrinoless double beta decay, with enriched Ge-76 in Gran Sasso 1990-2003.**

[H.V. Klapdor-Kleingrothaus, \(Heidelberg, Max Planck Inst.\)](#) . 2005. 4pp.

Prepared for 21st International Conference on Neutrino Physics and Astrophysics (Neutrino 2004), Paris, France, 14-19 Jun 2004.

Published in **Nucl.Phys.Proc.Supp.143:229-232,2005**. Also in \*Paris 2004, Neutrino physics and astrophysics\* 229-232

**23) New limits on spin-dependent weakly interacting massive particle (WIMP) nucleon coupling.**

[H.V. Klapdor-Kleingrothaus, I.V. Krivosheina, C. Tomei, \(Heidelberg, Max Planck Inst.\)](#) . 2005.

6pp.

Published in **Phys.Lett.B609:226-231,2005**.

**24) First evidence for lepton number violation and of the Majorana character of neutrinos.**

[H.V. Klapdor-Kleingrothaus, \(Heidelberg, Max Planck Inst.\)](#) . 2005. 6pp.

Published in **Nucl.Phys.Proc.Supp.145:219-224,2005**. Also in \*Conca Specchiulla 2004, Neutrino oscillation\* 219-224 Also in \*Edinburgh 2004, The identification of dark matter\* 633-646

**25) The GENIUS-Test-Facility and the HDMS detector in Gran Sasso.**

[H.V. Klapdor-Kleingrothaus, I.V. Krivosheina, \(Heidelberg, Max Planck Inst.\)](#) . 2005. 5pp.

Published in **Nucl.Phys.Proc.Supp.145:237-241,2005**. Also in \*Conca Specchiulla 2004, Neutrino oscillation\* 237-241 Also in \*Edinburgh 2004, The identification of dark matter\* 339-347

26) First evidence for lepton number violation: The Ge-76 double beta experiment in Gran Sasso 1990-2003.

H.V. Klapdor-Kleingrothaus, (Heidelberg, Max Planck Inst.) . Aug 2004. 18pp.

Prepared for 10th International Symposium on Particles, Strings and Cosmology (PASCOS 04 and Pran Nath Fest), Boston, Massachusetts, 16-22 Aug 2004.

Published in \*Boston 2004, Themes in unification\* 174-191

27) Search for neutrinoless double beta decay with enriched Ge-76 1990-2003: HEIDELBERG-MOSCOW experiment.

H.V. Klapdor-Kleingrothaus, (Heidelberg, Max Planck Inst.) , I.V. Krivosheina, (Heidelberg, Max Planck Inst. & Nizhnii Novgorod, Radiophys. Res. Inst.) , A. Dietz, (Heidelberg, Max Planck Inst.) , C. Tomei, (Heidelberg, Max Planck Inst. & L'Aquila U.) , O. Chkvorets, H. Strecker, (Heidelberg, Max Planck Inst.) . Apr 2004. 26pp.

INFN, Laboratori Nazionali del Gran Sasso, Annual Report 2003.

e-Print: **hep-ph/0404062**

28) Search for neutrinoless double beta decay with enriched Ge-76 in Gran Sasso 1990-2003.

H.V. Klapdor-Kleingrothaus, I.V. Krivosheina, A. Dietz, O. Chkvorets, (Heidelberg, Max Planck Inst.) . Apr 2004. 19pp.

Published in **Phys.Lett.B586:198-212,2004**.

e-Print: **hep-ph/0404088**

29) On dark matter search after DAMA with Ge-73.

V.A. Bednyakov, (Dubna, JINR) , H.V. Klapdor-Kleingrothaus, (Heidelberg, Max Planck Inst.) . Apr 2004. 29pp.

Published in **Phys.Rev.D70:096006,2004**.

e-Print: **hep-ph/0404102**

30) Data acquisition and analysis of the Ge-76 double beta experiment in Gran Sasso 1990-2003.

H.V. Klapdor-Kleingrothaus, A. Dietz, I.V. Krivosheina, O. Chkvorets, (Heidelberg, Max Planck Inst.) . Mar 2004. 3pp.

Published in **Nucl.Instrum.Meth.A522:371-406,2004**.

e-Print: **hep-ph/0403018**

31) Critical view to 'The IGEX neutrinoless double beta decay experiment'(Phys.Rev.D65:092007,2002).

H.V. Klapdor-Kleingrothaus, A. Dietz, (Heidelberg, Max Planck Inst.) , I.V. Krivosheina, (Heidelberg, Max Planck Inst. & Nizhnii Novgorod, Radiophys. Res. Inst.) . Mar 2004. 8pp.

Published in **Phys.Rev.D70:078301,2004**.

e-Print: **hep-ph/0403056**

**32) Double beta decay and the extra dimensional seesaw mechanism.**

Gautam Bhattacharyya, (Saha Inst.) , Hans Volker Klapdor-Kleingrothaus, (Heidelberg, Max Planck Inst.) , Heinrich Pas, (Wurzburg U.) , Apostolos Pilaftsis, (Manchester U.) . WUE-ITP-2004-003, Feb 2004. 12pp.

Presented at International Workshop on Astroparticle and High-Energy Physics (AHEP-2003), Valencia, Spain, 14-18 Oct 2003.

Published in \*Valencia 2003, Astroparticle and high energy physics\* AHEP2003/007

e-Print: [hep-ph/0402071](#)

**33) Support of evidence for neutrinoless double beta decay.**

H.V. Klapdor-Kleingrothaus, A. Dietz, (Heidelberg, Max Planck Inst.) , I.V. Krivosheina, (Heidelberg, Max Planck Inst. & Nizhnii Novgorod, Radiophys. Res. Inst.) , C. Dorr, (Heidelberg, Max Planck Inst.) , C. Tomei, (L'Aquila U.) . 2004. 15pp.

Published in [Phys.Lett.B578:54-62,2004](#).

e-Print: [hep-ph/0312171](#)

**34) The GENIUS-test-facility: First results on background from Rn-222 daughters.**

H.V. Klapdor-Kleingrothaus, C. Tomei, I.V. Krivosheina, O. Chkvorets, (Heidelberg, Max Planck Inst.) . 2004. 9pp.

Published in [Nucl.Instrum.Meth.A530:410-418,2004](#).

**35) First 10-kg of naked germanium detectors installed in liquid nitrogen in GENIUS Test-Facility in GRAN-SASSO.**

By HEIDELBERG-MOSCOW and GENIUS Collaborations ([H. Klapdor-Kleingrothaus for the collaboration](#)). 2004.

Prepared for International Europhysics Conference on High-Energy Physics (HEP 2003), Aachen, Germany, 17-23 Jul 2003.

Published in [Eur.Phys.J.C33:S962-S964,2004](#).

**36) From nuclear physics to physics beyond the standard model: first evidence for lepton number violation and the Majorana character of neutrinos.**

H.V. Klapdor-Kleingrothaus, (Heidelberg, Max Planck Inst.) . 2004. 20pp.

Published in [Int.J.Mod.Phys.D13:2107-2126,2004](#).

**37) Beyond the desert. Proceedings, 4th International Conference, Particle physics beyond the standard model, BEYOND 2003, Castle Ringberg, Tegernsee, Germany, June 9-14, 2003.**

H.V. Klapdor-Kleingrothaus, (ed.), (Heidelberg, Max Planck Inst.) . 2004. 1117pp.

Prepared for 4th International Conference on Physics Beyond the Standard Model: Beyond the Desert (BEYOND 03), Castle Ringberg, Tegernsee, Germany, 9-14 Jun 2003.

Published in Berlin, Germany: Springer (2004) 1117 p

**38) Status of absolute neutrino mass and double beta decay.**

H.V. Klapdor-Kleingrothaus, (Heidelberg, Max Planck Inst.) . Oct 2003. 23pp.

Prepared for International Workshop on Astroparticle and High-Energy Physics (AHEP-2003), Valencia, Spain, 14-18 Oct 2003.

Published in \*Valencia 2003, Astroparticle and high energy physics\* AHEP2003/066

**39) GENIUS-Test-Facility started operation in GRAN SASSO: With first ten kg of naked germanium detectors in liquid nitrogen.**

H.V. Klapdor-Kleingrothaus, I.V. Krivosheina, (Heidelberg, Max Planck Inst. & Nizhnii Novgorod, Radiophys. Res. Inst.) . Oct 2003. 11pp.

Prepared for International Workshop on Astroparticle and High-Energy Physics (AHEP-2003), Valencia, Spain, 14-18 Oct 2003.

Published in \*Valencia 2003, Astroparticle and high energy physics\* AHEP2003/060

**40) First 10-kg of naked Germanium detectors in liquid nitrogen installed in the GENIUS Test Facility.**

H.V. Klapdor-Kleingrothaus, O. Chkvorez, I.V. Krivosheina, H. Strecker, C. Tomei, (Heidelberg, Max Planck Inst.) . Sep 2003. 10pp.

Presented at 4th International Conference on Physics Beyond the Standard Model: Beyond the Desert (BEYOND 03), Castle Ringberg, Tegernsee, Germany, 9-14 Jun 2003.

Published in **Nucl.Instrum.Meth.A511:341-346,2003**. Also in \*Tegernsee 2003, Beyond the desert\* 561-574

e-Print: [hep-ph/0309170](#)

**41) Background analysis around Q(beta beta) for Ge-76 double beta decay experiments, and statistics at low count rates.**

H.V. Klapdor-Kleingrothaus, A. Dietz, (Heidelberg, Max Planck Inst.) , I.V. Krivosheina, (Heidelberg, Max Planck Inst. & Nizhnii Novgorod, Radiophys. Res. Inst.) , C. Dorr, (Heidelberg, Max Planck Inst.) , C. Tomei, (L'Aquila U.) . Aug 2003. 15pp.

Published in **Nucl.Instrum.Meth.A510:281-289,2003**.

e-Print: [hep-ph/0308275](#)

**42) 'Naked' crystals go underground.**

Hans Volker Klapdor-Kleingrothaus, (Heidelberg, Max Planck Inst.) . Jul 2003. 4pp.

Published in **CERN Cour.43N6:9,2003**.

e-Print: [hep-ph/0307329](#)

**43) Status of evidence for neutrinoless double beta decay, and the future: GENIUS and GENIUS TF.**

H.V. Klapdor-Kleingrothaus, (Heidelberg, Max Planck Inst.) . Jul 2003. 22pp.

To appear in the proceedings of 4th Workshop on Neutrino Oscillations and their Origin (NOON2003), Kanazawa, Japan, 10-14 Feb 2003.

Published in \*Kanazawa 2003, Neutrino oscillations and their origin\* 263-282

e-Print: [hep-ph/0307330](#)

**44) Searching for the annual modulation of dark matter signal with the GENIUS-TF experiment.**

C. Tomei, A. Dietz, I. Krivosheina, H.V. Klapdor-Kleingrothaus, (Heidelberg, Max Planck Inst.) . Jun 2003. 18pp.

To appear in the proceedings of 4th International Workshop on the Identification of Dark Matter (IDM 2002), York, England, 2-6 Sep 2002.

Published in **Nucl.Instrum.Meth.A508:343-352,2003**.

e-Print: [hep-ph/0306257](#)

**45) Kr-85 and Ar-39 background in GENIUS.**

H.V. Klapdor-Kleingrothaus, C. Tomei, (Heidelberg, Max Planck Inst.) . Jun 2003. 15pp.

Published in Nucl.Instrum.Meth.A508:337-342,2003.

e-Print: [hep-ph/0306258](#)

**46) The HEIDELBERG-MOSCOW Ge-76 double beta experiment in Gran Sasso 1990-2003 and status of absolute neutrino mass.**

By Heidelberg-Moscow and GENIUS Collaborations ([H.V. Klapdor-Kleingrothaus for the collaboration](#)). Jun 2003. 58pp.

Published in \*Tegernsee 2003, Beyond the desert\* 307-364

**47) Measurement of the Bi-214 spectrum in the energy region around the Q value of Ge-76 neutrinoless double beta decay.**

H.V. Klapdor-Kleingrothaus, O. Chkvorez, I.V. Krivosheina, C. Tomei, (Heidelberg, Max Planck Inst.) . May 2003. 11pp.

Published in Nucl.Instrum.Meth.A511:335-340,2003.

e-Print: [hep-ph/0309157](#)

**48) Consequences of neutrinoless double beta decay and WMAP.**

H.V. Klapdor-Kleingrothaus, (Heidelberg, Max Planck Inst.) , U. Sarkar, (Ahmedabad, Phys. Res. Lab) . Apr 2003. 15pp.

Published in Mod.Phys.Lett.A18:2243-2254,2003.

e-Print: [hep-ph/0304032](#)

**49) Status of evidence for neutrinoless double beta decay from the Heidelberg-Moscow experiment - and implications for supersymmetry.**

By Heidelberg-Moscow and GENIUS Collaborations ([H.V. Klapdor-Kleingrothaus for the collaboration](#)). Mar 2003. 24pp.

Prepared for International Conference on 20 Years of SUGRA and Search for SUSY and Unification (SUGRA 20), Boston, Massachusetts, 17-20 Mar 2003.

Published in \*Boston 2003, SUGRA20\* 525-548

**50) First evidence for neutrinoless double beta decay.**

H.V. Klapdor-Kleingrothaus, (Heidelberg, Max Planck Inst.) . Feb 2003. 16pp.

Spokesman for Moscow-Heidelberg and Genius Collaborations.

Presented at Zacatecas Forum in Physics 2002, Zacatecas, Mexico, 11-13 May 2002.

Published in Found.Phys.33:813-829,2003.

e-Print: [hep-ph/0302234](#)

**51) A Digital multichannel spectroscopy system with 100 MHz flash ADC module for the GENIUS-TF and GENIUS projects.**

T. Kihm, V.F. Bobrakov, H.V. Klapdor-Kleingrothaus, (Heidelberg, Max Planck Inst.) . Feb 2003. 8pp.

Published in Nucl.Instrum.Meth.B498:334-339,2003.

e-Print: [hep-ph/0302236](#)

**52) One year of evidence for neutrinoless double beta decay.**

H.V. Klapdor-Kleingrothaus, (Heidelberg, Max Planck Inst.) . Feb 2003. 42pp.

Special issue: Neutrinos, 2003 eds. D. Indumathi, G. Rajasekaran and M.V.N. Murthy.

Spokesman of the Heidelberg-Moscow and Genius Collaboration.

Submitted to Proc.Indian Natl.Sci.Acad.

e-Print: [hep-ph/0302237](#)

**53) To be or not to be? First evidence for neutrinoless double beta decay.**

H.V. Klapdor-Kleingrothaus, (Heidelberg, Max Planck Inst.) . Jan 2003. 16pp.

Talk given at Neutrinos and Implications for Physics Beyond the Standard Model, Stony Brook, New York, 11-13 Oct 2002.

Published in **Int.J.Mod.Phys.A18:4113-4128,2003**. Also in \*Stony Brook 2002, Neutrinos and implications for physics beyond the standard model\* 4113-4128

e-Print: [hep-ph/0303217](#)

**54) Neutrinos lead beyond the desert.**

H.V. Klapdor-Kleingrothaus, (Heidelberg, Max Planck Inst.) , V. Bednyakov, (Dubna, JINR) . 2003.

Prepared for Conference on Physics Beyond the Standard Model: Beyond the Desert 02, Oulu, Finland, 2-7 Jun 2002.

Published in **CERN Cour.43N2:29-30,2003**.

**55) Search for cold dark matter and solar neutrinos with GENIUS and GENIUS-TF.**

H.V. Klapdor-Kleingrothaus, I.V. Krivosheina, (Heidelberg, Max Planck Inst. & Nizhnii Novgorod, Radiophys. Res. Inst.) . 2003. 7pp.

Prepared for Zacatecas Forum in Physics 2002, Zacatecas, Mexico, 11-13 May 2002.

Published in **Found.Phys.33:831-837,2003**. Also in \*Oulu 2002, Beyond the desert\* 499-514

**56) Search for cold and hot dark matter with the Heidelberg-Moscow experiment, HDMS, GENIUS and GENIUS-TF.**

H.V. Klapdor-Kleingrothaus, A. Dietz, I.V. Krivosheina, (Heidelberg, Max Planck Inst.) . 2003. 5pp.

Prepared for 5th International UCLA Symposium on Sources and Detection of Dark Matter and Dark Energy in the Universe (DM 2002), Marina del Rey, California, 20-22 Feb 2002.

Published in **Nucl.Phys.Proc.Suppl.124:209-213,2003**. Also in \*Marina del Rey 2002, Dark matter\* 209-213

**57) New Monte-Carlo simulation of the HEIDELBERG-MOSCOW double beta decay experiment.**

C. Dorr, H.V. Klapdor-Kleingrothaus, (Heidelberg, Max Planck Inst.) . 2003. 26pp.

Published in **Nucl.Instrum.Meth.A513:596-621,2003**.

**58) Beyond the desert: Accelerator, non-accelerator and space approaches into the next millennium. Proceedings, 3rd International Conference on particle physics beyond the standard model, Oulu, Finland, June 2-7, 2002.**

H.V. Klapdor-Kleingrothaus, (ed.), (Heidelberg, Max Planck Inst.) . 2003. 734pp.

Prepared for Conference on Physics Beyond the Standard Model: Beyond the Desert 02, Oulu, Finland, 2-7 Jun 2002.

Published in Bristol, UK: IOP (2003) 734 p

**59) Beyond the Desert 2002: Accelerator, non-accelerator and space approaches in the new millennium. Proceedings.**

H.V. Klapdor-Kleingrothaus, (Ed.), (Heidelberg, Max Planck Inst.) . 2003. 734pp.

Proceedings of Conference on Physics Beyond the Standard Model: Beyond the Desert 02, Oulu, Finland, 2-7 Jun 2002.

e-Print: [hep-ph/0404064](#)

**60) Neutrino masses from double-beta decay.**

S. Stoica, (Bucharest, IFIN-HH) , H.V. Klapdor-Kleingrothaus, (Heidelberg, Max Planck Inst.) . 2003. 9pp.

Prepared for 1st National Romanian Conference of Theoretical Physics (CTP 2002), Magurele, Bucharest, Romania, 13-16 Sep 2002.

Published in **Rom.J.Phys.48:771-779,2003.**

**61) Neutrinoless double beta decay from singlet neutrinos in extra dimensions.**

G. Bhattacharyya, (Saha Inst.) , H.V. Klapdor-Kleingrothaus, (Heidelberg, Max Planck Inst.) , H. Pas, (Wurzburg U.) , A. Pilaftsis, (Manchester U.) . MC-TH-2002-12, SINP-TNP-02-36, WUE-ITP-2002-037, Dec 2002. 33pp.

Published in **Phys.Rev.D67:113001,2003.**

e-Print: [hep-ph/0212169](#)

**62) Search for neutrino mass and dark matter in underground experiments.**

H.V. Klapdor-Kleingrothaus, (Heidelberg, Max Planck Inst.) . Nov 2002. 27pp.

Presented at ICTP 6th School on Nonaccelerator Astroparticle Physics, Trieste, Italy, 9-20 Jul 2001.

Published in \*Trieste 2001, Non-accelerator astroparticle physics\* 148-174

e-Print: [hep-ph/0211033](#)

**63) Neutrinoless double beta decay and the neutrino mass matrix.**

H.V. Klapdor-Kleingrothaus, (Heidelberg, Max Planck Inst.) . Nov 2002. 18pp.

Presented at International Conference on Flavor Physics (ICFP 2001), Zhang-Jia-Jie City, Hunan, China, 31 May - 6 Jun 2001.

e-Print: [hep-ph/0211037](#)

**64) Neutrinoless double beta decay with scalar bilinears.**

H.V. Klapdor-Kleingrothaus, (Heidelberg, Max Planck Inst.) , Utpal Sarkar, (Ahmedabad, Phys. Res. Lab) . Nov 2002. 11pp.

Published in **Phys.Lett.B554:45-50,2003.**

e-Print: [hep-ph/0211274](#)

**65) Baryon and lepton number violation with scalar bilinears.**

H.V. Klapdor-Kleingrothaus, (Heidelberg, Max Planck Inst.) , Ernest Ma, (UC, Riverside) , Utpal Sarkar, (Ahmedabad, Phys. Res. Lab) . UCRHEP-T345, Oct 2002. 11pp.

Published in **Mod.Phys.Lett.A17:2221,2002.**

e-Print: [hep-ph/0210156](#)

**66) First evidence for neutrinoless double beta decay.**

By Heidelberg-Moscow and GENIUS Collaborations ([H.V. Klapdor-Kleingrothaus for the collaboration](#)). Sep 2002. 12pp.

Prepared for 4th International Workshop on the Identification of Dark Matter (IDM 2002), York, England, 2-6 Sep 2002.

Published in \*York 2002, The identification of dark matter\* 577-588

**67) Search for cold dark matter and solar neutrinos with GENIUS and GENIUS-TF.**

By Heidelberg-Moscow and GENIUS Collaborations ([H.V. Klapdor-Kleingrothaus et al.](#)). Sep 2002. 7pp.

Prepared for 4th International Workshop on the Identification of Dark Matter (IDM 2002), York, England, 2-6 Sep 2002.

Published in \*York 2002, The identification of dark matter\* 626-632

**68) Potential of the GENIUS-TF experiment for searching the annual modulation of the dark matter signal.**

[C. Tomei, H.V. Klapdor-Kleingrothaus, \(Heidelberg, Max Planck Inst.\)](#). Sep 2002. 6pp.

Prepared for 4th International Workshop on the Identification of Dark Matter (IDM 2002), York, England, 2-6 Sep 2002.

Published in \*York 2002, The identification of dark matter\* 633-638

**69) Squark, slepton and neutralino chargino coannihilation effects in the low-energy effective MSSM.**

[V.A. Bednyakov, \(Dubna, JINR\) , H.V. Klapdor-Kleingrothaus, V. Gronewold, \(Heidelberg, Max Planck Inst.\)](#). Aug 2002. 14pp.

Published in **Phys.Rev.D66:115005,2002**.

e-Print: [hep-ph/0208178](#)

**70) First results from the HDMS experiment in the final setup.**

[H.V. Klapdor-Kleingrothaus, A. Dietz, G. Heusser, I.V. Krivosheina, D. Mazza, H. Strecker, C. Tomei, \(Heidelberg, Max Planck Inst.\)](#). Jun 2002. 8pp.

Published in **Astropart.Phys.18:525-530,2003**.

e-Print: [hep-ph/0206151](#)

**71) GENIUS: A New underground observatory for nonaccelerator particle physics.**

[H.V. Klapdor-Kleingrothaus, \(Heidelberg, Max Planck Inst.\)](#). Jun 2002. 5pp.

Presented at TAUP 2001: Topics in Astroparticle and Underground Physics, Assergi, Italy, 8-12 Sep 2001.

Published in **Nucl.Phys.Proc.Suppl.110:364-368,2002**. Also in \*Assergi 2001, Topics in astroparticle and underground physics\* 364-368

e-Print: [hep-ph/0206249](#)

**72) Search for dark matter by GENIUS-TF and GENIUS.**

[H.V. Klapdor-Kleingrothaus, \(Heidelberg, Max Planck Inst.\)](#). Jun 2002. 3pp.

Presented at TAUP 2001: Topics in Astroparticle and Underground Physics, Assergi, Italy, 8-12 Sep 2001.

Published in **Nucl.Phys.Proc.Suppl.110:58-60,2002**. Also in \*Assergi 2001, Topics in astroparticle and underground physics\* 58-60

e-Print: [hep-ph/0206250](#)

**73) First evidence for neutrinoless double beta decay.**

H.V. Klapdor-Kleingrothaus, A. Dietz, I.V. Krivosheina, (Heidelberg, Max Planck Inst. & Nizhnii Novgorod, Radiophys. Res. Inst.) . Jun 2002.

Published in **Part.Nucl.Lett.110:57-79,2002.**

**74) Further support of evidence for neutrinoless double beta decay.**

H.V. Klapdor-Kleingrothaus, (Heidelberg, Max Planck Inst.) . Jun 2002. 26pp.

Prepared for Conference on Physics Beyond the Standard Model: Beyond the Desert 02, Oulu, Finland, 2-7 Jun 2002.

Published in \*Oulu 2002, Beyond the desert\* 215-240

**75) Consequences of neutrinoless double beta decay.**

H.V. Klapdor-Kleingrothaus, (Heidelberg, Max Planck Inst.) , U. Sarkar, (Ahmedabad, Phys. Res. Lab) . Jun 2002. 17pp.

Prepared for Conference on Physics Beyond the Standard Model: Beyond the Desert 02, Oulu, Finland, 2-7 Jun 2002.

Published in \*Oulu 2002, Beyond the desert\* 253-269

**76) Reply to a comment of article 'Evidence for neutrinoless double beta decay'.**

H.V. Klapdor-Kleingrothaus, (Heidelberg, Max Planck Inst.) . May 2002. 8pp.

e-Print: **hep-ph/0205228**

**77) Slepton and neutralino / chargino coannihilations in MSSM.**

V.A. Bednyakov, (Dubna, JINR) , H.V. Klapdor-Kleingrothaus, E. Zaitsev, (Heidelberg, Max Planck Inst.) . Mar 2002. 12pp.

Published in **Phys.Rev.D66:015010,2002.**

e-Print: **hep-ph/0203108**

**78) Neutrino mixing schemes and neutrinoless double beta decay.**

H.V. Klapdor-Kleingrothaus, (Heidelberg, Max Planck Inst.) , U. Sarkar, (Heidelberg, Max Planck Inst. & Visva Bharati U.) . Feb 2002. 12pp.

Published in **Phys.Lett.B532:71-76,2002.**

e-Print: **hep-ph/0202006**

**79) Implications of observed neutrinoless double beta decay.**

H.V. Klapdor-Kleingrothaus, (Heidelberg, Max Planck Inst.) , U. Sarkar, (Heidelberg, Max Planck Inst. & Visva Bharati U.) . Jan 2002. 16pp.

Published in **Mod.Phys.Lett.A16:2469-2482,2001.**

e-Print: **hep-ph/0201224**

**80) Majorana neutrinos with split fermions in extra dimensions.**

H.V. Klapdor-Kleingrothaus, (Heidelberg, Max Planck Inst.) , U. Sarkar, (Heidelberg, Max Planck Inst. & Visva Bharati U.) . Jan 2002. 12pp.

Published in **Phys.Lett.B541:332-337,2002.**

e-Print: **hep-ph/0201226**

81) Direct dark matter detection and neutrinoless double beta decay with an array of 40-kg of 'naked' natural Ge and 11-kg of enriched Ge-76 detectors in liquid nitrogen.

L. Baudis, A. Dietz, G. Heusser, B. Majorovits, H. Strecker, H.V. Klapdor-Kleingrothaus, (Heidelberg, Max Planck Inst.) . 2002.

Published in **Astropart.Phys.17:383-391,2002**.

82) Is the neutrino a Majorana particle?

H.V. Klapdor-Kleingrothaus, (Heidelberg, Max Planck Inst.) . 2002.

Published in **Phys.Unserer Zeit 33:155,2002**.

83) Neutrinoless double beta decay: Status of evidence.

H.V. Klapdor-Kleingrothaus, A. Dietz, I.V. Krivosheina, (Heidelberg, Max Planck Inst. & Nizhnii Novgorod, Radiophys. Res. Inst.) . 2002.

Eds. H.V. Klapdor-Kleingrothaus and R. Viollier, Springer Verlag, Heidelberg, p.367-403, 2002. Presented at DARK 2002: 4th International Heidelberg Conference on Dark Matter in Astro and Particle Physics, Cape Town, South Africa, 4-9 Feb 2002.

Published in **Found.Phys.32:1181-1223,2002**, Erratum-**ibid.33:679-684,2003**. Also in \*Cape Town 2002, Dark matter in astro- and particle physics\* 367-403

e-Print: [hep-ph/0302248](#)

84) Dark matter search.

H.V. Klapdor-Kleingrothaus, (Heidelberg, Max Planck Inst.) . 2002.

Prepared for 20th International Symposium on Lepton and Photon Interactions at High Energies (LP 01), Rome, Italy, 23-28 Jul 2001.

Published in **Int.J.Mod.Phys.A17:3421-3431,2002**. Also in \*Rome 2001, Lepton and photon interactions at high energies\* 515-525

85) Neutrinoless double-beta decay: Status of evidence and future.

H.V. Klapdor-Kleingrothaus, (Heidelberg, Max Planck Inst.) . 2002.

Prepared for 3rd International Conference on Nonaccelerator New Physics (NANP 01), Dubna, Moscow Region Russia, 19-23 Jun 2001.

Published in **Phys.Atom.Nucl.65:2135-2146,2002**, **Yad.Fiz.65:2198-2209,2002**.

86) Dark matter in astro- and particle physics. Proceedings, 4th Heidelberg International Conference, DARK 2002, Cape Town, South Africa, February 4-9, 2002.

H.V. Klapdor-Kleingrothaus, (ed.), (Heidelberg, Max Planck Inst.) , R.D. Viollier, (ed.), (Cape Town U.) . 2002. 663pp.

Hardcopy at DESY.

Prepared for DARK 2002: 4th International Heidelberg Conference on Dark Matter in Astro and Particle Physics, Cape Town, South Africa, 4-9 Feb 2002.

Published in Berlin, Germany: Springer (2002) 663 p

87) Evidence for neutrinoless double beta decay revisited: Reply to a comment.

H.V. Klapdor-Kleingrothaus, A. Dietz, I.V. Krivosheina, (Heidelberg, Max Planck Inst. & Nizhnii Novgorod, Radiophys. Res. Inst.) . 2002.

Hardcopy at DESY.

Prepared for DARK 2002: 4th International Heidelberg Conference on Dark Matter in Astro and Particle Physics, Cape Town, South Africa, 4-9 Feb 2002.

Published in \*Cape Town 2002, Dark matter in astro- and particle physics\* 404-411

**88) GENIUS and GENIUS-TF: The potential for cold dark matter and solar neutrino search.**  
H.V. Klapdor-Kleingrothaus, I.V. Krivosheina, (Heidelberg, Max Planck Inst. & Nizhnii Novgorod, Radiophys. Res. Inst.) . 2002.

Hardcopy at DESY.

Prepared for DARK 2002: 4th International Heidelberg Conference on Dark Matter in Astro and Particle Physics, Cape Town, South Africa, 4-9 Feb 2002.

Published in \*Cape Town 2002, Dark matter in astro- and particle physics\* 473-484

**89) Neutrinoless double beta decay and neutrino oscillations.**

By HEIDELBERG-MOSCOW and GENIUS Collaborations ([H.V. Klapdor-Kleingrothaus for the collaboration](#)). Dec 2001.

Prepared for 3rd Workshop on Neutrino Oscillations and Their Origin (NOON 2001), Kashiwa, Japan, 5-8 Dec 2001.

Published in \*Kashiwa 2001, Neutrino oscillations and their origin\* 178-196

**90) Sneutrino induced like sign dilepton signal with conserved R parity.**

S. Kolb, (Heidelberg, Max Planck Inst.) , M. Hirsch, (Heidelberg, Max Planck Inst. & Southampton U.) , H.V. Klapdor-Kleingrothaus, (Heidelberg, Max Planck Inst.) , O. Panella, (Heidelberg, Max Planck Inst. & INFN, Perugia) . Nov 2001. 42pp.

Published in **Phys.Rev.D64:115006,2001**.

e-Print: [hep-ph/0102175](#)

**91) Neutrinoless double beta decay and the neutrino mass matrix.**

H.V. Klapdor-Kleingrothaus, (Heidelberg, Max Planck Inst.) . May 2001.

Prepared for International Conference on Flavor Physics (ICFP 2001), Zhang-Jia-Jie City, Hunan, China, 31 May - 6 Jun 2001.

Published in \*Zhang-Jia-Jie 2001, Flavor physics\* 93-110

**92) Neutrinoless double beta decay matrix elements within the second quasirandom phase approximation method.**

S. Stoica, (Bucharest, IFIN-HH) , H. V. Klapdor-Kleingrothaus, (Heidelberg, Max Planck Inst.) . Apr 2001. 6pp.

Published in **Phys.Rev.C63:064304,2001**.

**93) Evidence for neutrinoless double beta decay.**

H.V. Klapdor-Kleingrothaus, A. Dietz, H.L. Harney, (Heidelberg, Max Planck Inst.) , I.V. Krivosheina, (Heidelberg, Max Planck Inst. & Nizhnii Novgorod, Radiophys. Res. Inst.) . Jan 2001. 14pp.

Published in **Mod.Phys.Lett.A16:2409-2420,2001**.

e-Print: [hep-ph/0201231](#)

**94) Critical view on double-beta decay matrix elements within quasi random phase approximation-based methods.**

S. Stoica, (Bucharest, IFIN-HH) , H.V. Klapdor-Kleingrothaus, (Heidelberg, Max Planck Inst.) . 2001.

Published in **Nucl.Phys.A694:269-294,2001**.

95) Dark matter in astro- and particle physics. Proceedings, 3rd International Conference, DARK 2000, Heidelberg, Germany, July 10-14, 2000.

H.V. Klapdor-Kleingrothaus, (ed.), (Heidelberg, Max Planck Inst.) . 2001. 740pp.

Prepared for 3rd International Conference on Dark Matter in Astro and Particle Physics (Dark 2000), Heidelberg, Germany, 10-16 Jul 2000.

Berlin, Germany: Springer (2001) 740 p.

96) Sixty years of double beta decay: From nuclear physics to beyond standard model particle physics.

H.V. Klapdor-Kleingrothaus, (Heidelberg, Max Planck Inst.) . 2001. 1281pp.

Singapore, Singapore: World Scientific (2001) 1281 p.

97) Double beta decay: Historical retrospective and perspectives.

H.V. Klapdor-Kleingrothaus, (Heidelberg, Max Planck Inst.) . 2001.

In \*Klapdor-Kleingrothaus, H.V.: Sixty years of double beta decay\* 1-96.

98) GENIUS-TF: A Test facility for the GENIUS project.

H.V. Klapdor-Kleingrothaus, L. Baudis, A. Dietz, G. Heusser, B. Majorovits, H. Strecker,

(Heidelberg, Max Planck Inst.) . Dec 2000. 15pp.

Published in Nucl.Instrum.Meth.A481:149-159,2002.

e-Print: [hep-ex/0012022](#)

99) Information about the neutrino mass matrix from double beta decay.

H.V. Klapdor-Kleingrothaus, (Heidelberg, Max Planck Inst.) . Dec 2000. 16pp.

Talk presented at 2nd Workshop on Neutrino Oscillations and Their Origin (NOON 2000), Tokyo, Japan, 6-18 Dec 2000.

Published in \*Tokyo 2000, Neutrino oscillations and their origin\* 219-234

e-Print: [hep-ph/0103074](#)

100) New underground neutrino observatory - GENIUS - in the new millenium: For solar neutrinos, dark matter and double beta decay.

H.V. Klapdor-Kleingrothaus, (Heidelberg, Max Planck Inst.) . Dec 2000. 16pp.

Presented at International Workshop on Low Energy Solar Neutrinos, Tokyo, Japan, 4-5 Dec 2000.

Published in \*Tokyo 2000, Low energy solar neutrino detection\* 116-131

e-Print: [hep-ph/0104028](#)

101) Update of the direct detection of dark matter and the role of the nuclear spin.

V.A. Bednyakov, (Dubna, JINR) , H.V. Klapdor-Kleingrothaus, (Heidelberg, Max Planck Inst.) .

Nov 2000. 16pp.

Published in Phys.Rev.D63:095005,2001.

e-Print: [hep-ph/0011233](#)

102) Double-beta decay matrix elements for ge-76.

S. Stoica, (Bucharest, IFIN-HH) , H.V. Klapdor-Kleingrothaus, (Heidelberg, Max Planck Inst.) . Oct 2000. 19pp.

Published in Eur.Phys.J.A9:345-352,2000.

e-Print: [nucl-th/0010106](#)

**103) Neutrino mass from laboratory: Contribution of double beta decay to the neutrino mass matrix.**

H.V. Klapdor-Kleingrothaus, (Heidelberg, Max Planck Inst.) . Sep 2000. 5pp.

Talk presented at Europhysics Neutrino Oscillation Workshop (NOW 2000), Conca Specchiulla, Otranto, Lecce, Italy, 9-16 Sep 2000.

Published in **Nucl.Phys.Proc.Suppl.100:309-313,2001**. Also in \*Otranto 2000, Europhysics neutrino oscillation workshop\* 309-313

e-Print: **hep-ph/0102276**

**104) GENIUS: A New facility of nonaccelerator particle physics.**

H.V. Klapdor-Kleingrothaus, (Heidelberg, Max Planck Inst.) . Sep 2000. 6pp.

Talk presented at Europhysics Neutrino Oscillation Workshop (NOW 2000), Conca Specchiulla, Otranto, Lecce, Italy, 9-16 Sep 2000.

Published in **Nucl.Phys.Proc.Suppl.100:350-355,2001**. Also in \*Otranto 2000, Europhysics neutrino oscillation workshop\* 350-355

e-Print: **hep-ph/0102277**

**105) Recent results from the HDMS experiment.**

H.V. Klapdor-Kleingrothaus, L. Baudis, A. Dietz, G. Heusser, I.V. Krivosheina, B. Majorovits, S. Kolb, H. Strecker, (Heidelberg, Max Planck Inst.) . Sep 2000. 6pp.

Talk presented at and to be published in the proceedings of 3rd International Workshop on the Identification of Dark Matter (IDM2000), York, England, 18-22 Sep 2000.

Published in \*York 2000, The identification of dark matter\* 415-420

e-Print: **hep-ph/0103077**

**106) GENIUS and the GENIUS TF: A New observatory for WIMP dark matter and neutrinoless double beta decay.**

H.V. Klapdor-Kleingrothaus, B. Majorovits, (Heidelberg, Max Planck Inst.) . Sep 2000. 10pp.

Talk presented at and to be published in the proceedings of 3rd International Workshop on the Identification of Dark Matter (IDM2000), York, England, 18-22 Sep 2000.

Published in \*York 2000, The identification of dark matter\* 593-602

e-Print: **hep-ph/0103079**

**107) A Superformula for neutrinoless double beta decay. 2. The Short range part.**

H. Pas, (Heidelberg, Max Planck Inst.) , M. Hirsch, (Valencia U.) , H.V. Klapdor-Kleingrothaus, (Heidelberg, Max Planck Inst.) , S.G. Kovalenko, (Valparaiso U.) . Aug 2000. 8pp.

Published in **Phys.Lett.B498:35-39,2001**.

e-Print: **hep-ph/0008182**

**108) First results from the Heidelberg Dark Matter Search Experiment.**

L. Baudis, A. Dietz, B. Majorovits, F. Schwamm, H. Strecker, H.V. Klapdor-Kleingrothaus, (Heidelberg, Max Planck Inst.) . Aug 2000. 11pp.

Published in **Phys.Rev.D63:022001,2001**.

e-Print: **astro-ph/0008339**

**109) Higgs bosons and the indirect search for WIMPs.**

V.A. Bednyakov, (Dubna, JINR) , H.V. Klapdor-Kleingrothaus, H. Tu, (Heidelberg, Max Planck Inst.) . Jul 2000. 10pp.

Talk given at 3rd International Conference on Dark Matter in Astro and Particle Physics (Dark 2000), Heidelberg, Germany, 10-16 Jul 2000.

Published in **Phys.Rev.D64:075004,2001**. Also in \*Heidelberg 2000, Dark matter in astro- and particle physics\* 667-676

e-Print: [hep-ph/0101223](#)

**110) New physics in the new millennium with GENIUS: Double beta decay, dark matter, solar neutrinos.**

H.V. Klapdor-Kleingrothaus, (Heidelberg, Max Planck Inst.) . Jul 2000. 20pp.

Talk presented at International Workshop on Neutrinos and Physics Beyond the Standard Model NANPino (Non-Accelerator New Physics in Neutrino Observations), Dubna, Moscow region, Russia, 19-22 Jul 2000.

Published in **Part.Nucl.Lett.104:20-39,2001**.

e-Print: [hep-ph/0102319](#)

**111) Latest results from the Heidelberg-Moscow double beta decay experiment.**

H.V. Klapdor-Kleingrothaus *et al.* Jul 2000. 14pp.

Talk presented at 3rd International Conference on Dark Matter in Astro and Particle Physics (Dark 2000), Heidelberg, Germany, 10-16 Jul 2000.

Published in **Eur.Phys.J.A12:147-154,2001**. Also in \*Heidelberg 2000, Dark matter in astro- and particle physics\* 520-533

e-Print: [hep-ph/0103062](#)

**112) Neutrinoless double beta decay potential in a large mixing angle world.**

H.V. Klapdor-Kleingrothaus, (Heidelberg, Max Planck Inst.) , H. Pas, (Vanderbilt U.) , A.Yu. Smirnov, (ICTP, Trieste & Moscow, INR) . Jul 2000. 15pp.

Talk presented at 3rd International Conference on Dark Matter in Astro and Particle Physics (Dark 2000), Heidelberg, Germany, 10-16 Jul 2000.

Published in \*Heidelberg 2000, Dark matter in astro- and particle physics\* 420-434

e-Print: [hep-ph/0103076](#)

**113) Status of the HDMS experiment, the GENIUS project and the GENIUS-TF.**

H.V. Klapdor-Kleingrothaus, B. Majorovits, L. Baudis, A. Dietz, G. Heusser, I. Krivosheina, H. Strecker, (Heidelberg, Max Planck Inst.) . Jul 2000. 16pp.

To appear in the proceedings of 3rd International Conference on Dark Matter in Astro and Particle Physics (Dark 2000), Heidelberg, Germany, 10-16 Jul 2000.

Published in \*Heidelberg 2000, Dark matter in astro- and particle physics\* 553-568

e-Print: [hep-ph/0103082](#)

**114) Collider signatures of sneutrino cold dark matter.**

S. Kolb, (Heidelberg, Max Planck Inst.) , H.V. Klapdor-Kleingrothaus, M. Hirsch, (Southampton U.) , O. Panella, (INFN, Perugia) . Jul 2000.

Prepared for 3rd International Conference on Dark Matter in Astro and Particle Physics (Dark 2000), Heidelberg, Germany, 10-16 Jul 2000.

Published in \*Heidelberg 2000, Dark matter in astro- and particle physics\* 276-282

**115) The Quest for the neutrino mass spectrum.**

H.V. Klapdor-Kleingrothaus, H. Pas, . Jun 2000. 18pp.

Published in **Comments Nucl.Part.Phys.2:69-87,2001**.

e-Print: [physics/0006024](#)

**116) On nuclear matrix element uncertainties in short range 0 neutrino beta beta decay.**

H.V. Klapdor-Kleingrothaus, H. Pas, (Heidelberg, Max Planck Inst.) . May 2000. 3pp.

Published in **Phys.Rev.D62:117301,2000**.

e-Print: [hep-ph/0005045](#)

**117) Neutrino Majorana mass and baryon number of the universe below the electroweak symmetry breaking scale.**

H.V. Klapdor-Kleingrothaus, S. Kolb, (Heidelberg, Max Planck Inst.) , U. Sarkar, (Heidelberg, Max Planck Inst. & Ahmedabad, Phys. Res. Lab) . May 2000. 7pp.

Published in **Phys.Lett.B487:289-293,2000**.

e-Print: [hep-ph/0005268](#)

**118) Lepton number violation interactions and their effects on neutrino oscillation experiments.**

Sven Bergmann, (Weizmann Inst.) , H.V. Klapdor-Kleingrothaus, Heinrich Pas, (Heidelberg, Max Planck Inst.) . WIS-4-00-DPP, Apr 2000. 28pp.

Published in **Phys.Rev.D62:113002,2000**.

e-Print: [hep-ph/0004048](#)

**119) Confronting dilaton exchange gravity with experiments.**

H.V. Klapdor-Kleingrothaus, H. Pas, (Heidelberg, Max Planck Inst.) , U. Sarkar, (Ahmedabad, Phys. Res. Lab) . Apr 2000. 7pp.

Published in **Phys.Lett.B488:398-401,2000**.

e-Print: [hep-ph/0004122](#)

**120) Effects of quantum space-time foam in the neutrino sector.**

H.V. Klapdor-Kleingrothaus, H. Pas, (Heidelberg, Max Planck Inst.) , U. Sarkar, (Ahmedabad, Phys. Res. Lab) . Apr 2000. 5pp.

Published in **Eur.Phys.J.A8:577-580,2000**.

e-Print: [hep-ph/0004123](#)

**121) Neutrino mass spectrum and neutrinoless double beta decay.**

H.V. Klapdor-Kleingrothaus, H. Pas, (Heidelberg, Max Planck Inst.) , A.Y. Smirnov, (Moscow, INR) . Mar 2000. 48pp.

Published in **Phys.Rev.D63:073005,2001**.

e-Print: [hep-ph/0003219](#)

**122) Comment on `Closing the neutrinoless double beta decay window into VEP and / or VLI'.**

H.V. Klapdor-Kleingrothaus, H. Pas, (Heidelberg, Max Planck Inst.) , U. Sarkar, (Ahmedabad, Phys. Res. Lab) . Feb 2000. 4pp.

In \*Klapdor-Kleingrothaus, H.V. (ed.): Sixty years of double beta decay\* 961-964.

e-Print: [hep-ph/0002105](#)

123) Effects of new gravitational interactions on neutrinoless double beta decay.

H.V. Klapdor-Kleingrothaus, H. Pas, (Heidelberg, Max Planck Inst.) , U. Sarkar, (Ahmedabad, Phys. Res. Lab) . Feb 2000. 10pp.

Published in **Phys.Lett.B478:269-274,2000**.

e-Print: [hep-ph/0002215](#)

124) Hot and cold dark matter search with GENIUS.

By GENIUS Collaboration ([H. V. Klapdor-Kleingrothaus et al.](#)). Feb 2000. 11pp.

Springer 2000, edited by D. Cline.

To be published in the proceedings of 4th International Symposium on Sources and Detection of Dark Matter in the Universe (DM 2000), Marina del Rey, California, 23-25 Feb 2000.

Published in \*Marina del Rey 2000, Sources and detection of dark matter and dark energy in the universe\* 493-504

e-Print: [astro-ph/0005568](#)

125) Status of dark matter search with the HDMS experiment and the GENINO project.

B. Majorovits, L. Baudis, A. Dietz, F. Schwamm, H. Strecker, H.V. Klapdor-Kleingrothaus, (Heidelberg, Max Planck Inst.) . Feb 2000.

Prepared for 4th International Symposium on Sources and Detection of Dark Matter in the Universe (DM 2000), Marina del Rey, California, 23-25 Feb 2000.

Published in \*Marina del Rey 2000, Sources and detection of dark matter and dark energy in the universe\* 387-398

126) Neutrinoless double-beta decay and dark matter search with GENIUS.

H.V. Klapdor-Kleingrothaus, S. Kolb, (Heidelberg, Max Planck Inst.) . 2000.

Published in **Phys.Atom.Nucl.63:1249-1258,2000, Yad.Fiz.63:1322-1331,2000**.

127) Beyond the desert: Accelerator, non-accelerator and space approaches into the next millennium. Proceedings, 2nd International Conference on particle physics beyond the standard model, Ringberg Castle, Tegernsee, Germany, June 6-12, 1999.

H.V. Klapdor-Kleingrothaus, I.V. Krivosheina, (eds.), (Heidelberg, Max Planck Inst. & Nizhnii Novgorod, IAP) . 2000. 1236pp.

Prepared for 2nd International Conference Physics Beyond the Standard Model: Beyond the Desert 99: Accelerator, Nonaccelerator and Space Approaches, Ringberg Castle, Tegernsee, Germany, 6-12 Jun 1999.

Published in Bristol, UK: IOP (2000) p. 1236

128) BARGEIN: A simple detector to test evidence for dark matter.

B. Majorovits, L. Baudis, G. Heusser, H. Strecker, H.V. Klapdor-Kleingrothaus, (Heidelberg, Max Planck Inst.) . 2000.

Published in **Nucl.Instrum.Meth.A455:369-375,2000**.

129) Identification of single-site events in germanium detectors by digital pulse shape analysis.

J. Hellmig, (UC, Berkeley, Astron. Dept.) , H.V. Klapdor-Kleingrothaus, (Heidelberg, Max Planck Inst.) . 2000.

Published in **Nucl.Instrum.Meth.A455:638-644,2000**.

130) Searching for double beta decay.

H.V. Klapdor-Kleingrothaus, (Heidelberg, Max Planck Inst.) . 2000.

Published in **Camb.Monogr.Part.Phys.Nucl.Phys.Cosmol.14:113-126,2000**.

**131) Ten years of Heidelberg-Moscow experiment: A fresh look.**

H.V. Klapdor-Kleingrothaus, (Heidelberg, Max Planck Inst.) . Dec 1999.

Prepared for International Symposium on Advances in Nuclear Physics, Bucharest, Romania, 9-10 Dec 1999.

Published in \*Bucharest 1999, Advances in nuclear physics\* 123-129

**132) Digital pulse shape analysis by neural networks for the Heidelberg-Moscow Double Beta-Decay experiment.**

B. Majorovits, H.V. Klapdor-Kleingrothaus, (Heidelberg, Max Planck Inst.) . Nov 1999. 12pp.

Published in **Eur.Phys.J.A6:463-469,1999**.

e-Print: **hep-ex/9911001**

**133) Collider signatures of sneutrino cold dark matter.**

S. Kolb, (Heidelberg, Max Planck Inst.) , M. Hirsch, (Heidelberg, Max Planck Inst. & Valencia U.) , H.V. Klapdor-Kleingrothaus, (Heidelberg, Max Planck Inst.) , O. Panella, (Heidelberg, Max Planck Inst. & INFN, Perugia) . Oct 1999. 10pp.

Published in **Phys.Lett.B478:262-268,2000**.

e-Print: **hep-ph/9910542**

**134) Light lepton number violating sneutrinos and the baryon number of the universe.**

H.V. Klapdor-Kleingrothaus, (Heidelberg, Max Planck Inst.) , S. Kolb, (Heidelberg, Max Planck Inst. & Moscow, INR) , V.A. Kuzmin, (Moscow, INR) . Sep 1999. 11pp.

Published in **Phys.Rev.D62:035014,2000**.

e-Print: **hep-ph/9909546**

**135) Neutrinoless double beta decay and new physics in the neutrino sector.**

H.V. Klapdor-Kleingrothaus, H. Pas, (Heidelberg, Max Planck Inst.) . Sep 1999. 8pp.

Presented at COSMO 99: 3rd International Conference on Particle Physics and the Early Universe, Trieste, Italy, 27 Sep - 3 Oct 1999.

In \*Klapdor-Kleingrothaus, H.V. (ed.): Sixty years of double beta decay\* 755-762.

e-Print: **hep-ph/0002109**

**136) SUSY spectrum constraints on direct dark matter detection.**

V.A. Bednyakov, (Dubna, JINR & Heidelberg, Max Planck Inst.) , H.V. Klapdor-Kleingrothaus, (Heidelberg, Max Planck Inst.) . Aug 1999. 12pp.

Published in **Phys.Rev.D62:043524,2000**.

e-Print: **hep-ph/9908427**

**137) GENIUS: A Supersensitive germanium detector system for rare events: Proposal.**

By GENIUS Collaboration (H.V. Klapdor-Kleingrothaus *et al.*). MPI-H-V26-1999, Aug 1999.

111pp.

Prepared for 2nd International Conference Physics Beyond the Standard Model: Beyond the Desert 99: Accelerator, Nonaccelerator and Space Approaches, Ringberg Castle, Tegernsee, Germany, 6-12 Jun 1999.

Published in \*Tegernsee 1999, Beyond the desert\* 915-1014

e-Print: **hep-ph/9910205**

**138) Perspectives of double beta and dark matter search as windows to new physics.**

H.V. Klapdor-Kleingrothaus, (Heidelberg, Max Planck Inst.) . Jul 1999. 39pp.

Prepared for International Conference on Symmetries in High-Energy Physics and Applications, Ioannina, Greece, 30 Sep - 5 Oct 1998.

Published in **Springer Tracts Mod.Phys.163:69-104,2000.**

e-Print: [hep-ex/9907040](#)

**139) Neutrino mass and magnetic moment in supersymmetry without R parity in the light of recent data.**

Gautam Bhattacharyya, (Heidelberg, Max Planck Inst. & Saha Inst.) , H.V. Klapdor-Kleingrothaus, Heinrich Pas, (Heidelberg, Max Planck Inst.) . SINP-TNP-99-25, Jul 1999. 7pp.

Published in **Phys.Lett.B463:77-82,1999.**

e-Print: [hep-ph/9907432](#)

**140) Weak interaction rates of sd- shell nuclei in stellar environment calculated in the proton neutron quasiparticle random phase approximation.**

Jameel Un Nabi, Hans Volker Klapdor Kleingrothaus, (Heidelberg, Max Planck Inst.) . Jul 1999. 64pp.

Published in **Atom.Data Nucl.Data Tabl.71:149-345,1999.**

e-Print: [nucl-th/9907106](#)

**141) Stellar weak interaction rates and energy losses for fp shell nuclei calculated in the proton neutron quasiparticle random phase approximation. 1. A = 40 to 60.**

Jameel-Un Nabi, Hans Volker Klapdor-Kleingrothaus, (Heidelberg, Max Planck Inst.) . Jul 1999. 119pp.

e-Print: [nucl-th/9907112](#)

**142) Stellar weak interaction rates and energy losses for fp shell nuclei calculated in the proton neutron quasiparticle random phase approximation. 2. A = 61 to 80.**

Jameel Un Nabi, Hans Volker Klapdor-Kleingrothaus, (Heidelberg, Max Planck Inst.) . Jul 1999. 125pp.

e-Print: [nucl-th/9907115](#)

**143) Detection of low-energy solar neutrinos with HP germanium.**

L. Baudis, H.V. Klapdor-Kleingrothaus, (Heidelberg, Max Planck Inst.) . Jun 1999. 4pp.

Published in **Eur.Phys.J.A5:441-443,1999.**

e-Print: [hep-ex/9906044](#)

**144) New exotics in the double beta decay contributions zoo.**

H.V. Klapdor-Kleingrothaus, H. Pas, (Heidelberg, Max Planck Inst.) , U. Sarkar, (Ahmedabad, Phys. Res. Lab) . Jun 1999. 11pp.

Talk given at 2nd International Conference Physics Beyond the Standard Model: Beyond the Desert 99: Accelerator, Nonaccelerator and Space Approaches, Ringberg Castle, Tegernsee, Germany, 6-12 Jun 1999.

Published in \*Tegernsee 1999, Beyond the desert 1999\* 165-174

e-Print: [hep-ph/0002118](#)

**145) Direct detection of nonbaryonic dark matter.**

Laura Baudis, H.V. Klapdor-Kleingrothaus, (Heidelberg, Max Planck Inst.) . Jun 1999. 18pp.

To be published in the proceedings of 2nd International Conference Physics Beyond the Standard Model: Beyond the Desert 99: Accelerator, Nonaccelerator and Space Approaches, Ringberg Castle, Tegernsee, Germany, 6-12 Jun 1999.

Published in \*Tegernsee 1999, Beyond the desert 1999\* 881-898

e-Print: [astro-ph/0003434](#)

**146) GENIUS: The First real time detector for solar p p neutrinos?**

Laura Baudis, H.V. Klapdor-Kleingrothaus, (Heidelberg, Max Planck Inst.) . Jun 1999. 14pp.

To be published in the proceedings of 2nd International Conference Physics Beyond the Standard Model: Beyond the Desert 99: Accelerator, Nonaccelerator and Space Approaches, Ringberg Castle, Tegernsee, Germany, 6-12 Jun 1999.

Published in \*Tegernsee 1999, Beyond the desert 1999\* 1023-1036

e-Print: [astro-ph/0003435](#)

**147) Light lepton number violating sneutrinos and the baryon number of the universe.**

H.V. Klapdor-Kleingrothaus, S. Kolb, V.A. Kuzmin, (Heidelberg, Max Planck Inst. & Moscow, INR) . Jun 1999.

Prepared for 2nd International Conference Physics Beyond the Standard Model: Beyond the Desert 99: Accelerator, Nonaccelerator and Space Approaches, Ringberg Castle, Tegernsee, Germany, 6-12 Jun 1999.

Published in \*Tegernsee 1999, Beyond the desert\* 481-491

**148) Weak interactions and supernovae.**

J.N. Nabi, (Louisiana State U.) , H.V. Klapdor-Kleingrothaus, (Heidelberg, Max Planck Inst.) . Jun 1999.

Prepared for 2nd International Conference Physics Beyond the Standard Model: Beyond the Desert 99: Accelerator, Nonaccelerator and Space Approaches, Ringberg Castle, Tegernsee, Germany, 6-12 Jun 1999.

Published in \*Tegernsee 1999, Beyond the desert\* 1071-1082

**149) Limits on the Majorana neutrino mass in the 0.1-eV range.**

L. Baudis *et al.* Feb 1999. 6pp.

Published in **Phys.Rev.Lett.83:41-44,1999.**

e-Print: [hep-ex/9902014](#)

**150) High purity germanium detector ionization pulse shapes of nuclear recoils, gamma interactions and microphonism.**

L. Baudis, J. Hellwig, H.V. Klapdor-Kleingrothaus, Yorck Alexander Ramachers, (Heidelberg, Max Planck Inst.) , J.W. Hammer, A. Mayer, (Stuttgart U.) . Jan 1999. 12pp.

Published in **Nucl.Instrum.Meth.A418:348-354,1998.**

e-Print: [hep-ex/9901028](#)

**151) Microscopic calculations of weak interaction rates of nuclei in stellar environment for A = 18 to 100.**

Jameel-Un Nabi, Hans Volker Klapdor-Kleingrothaus, (Heidelberg, Max Planck Inst.) . Jan 1999. 9pp.

Published in **Eur.Phys.J.A5:337-339,1999.**

e-Print: [nucl-th/9901090](#)

**152) Dark matter search with the HDMS-experiment and the GENIUS project.**

L. Baudis, J. Hellmig, H.V. Klapdor-Kleingrothaus, Yorck Alexander Ramachers, H. Strecker, (Heidelberg, Max Planck Inst.) . 1999.

Given at 5th International Workshop on Topics in Astroparticle and Underground Physics (TAUP 97), Gran Sasso, Italy, 7-11 Sep 1997.

Published in **Nucl.Phys.Proc.Suppl.70:106-110,1999.**

**153) A xenon solar neutrino detector.**

A.Sh. Georgadze, Yu.G. Zdesenko, (Kiev, INR) , H.V. Klapdor-Kleingrothaus, H. Pas, (Heidelberg, Max Planck Inst.) . 1999.

Given at 5th International Workshop on Topics in Astroparticle and Underground Physics (TAUP 97), Gran Sasso, Italy, 7-11 Sep 1997.

Published in **Nucl.Phys.Proc.Suppl.70:354-357,1999.**

**154) Towards a superformula for neutrinoless double beta decay.**

H. Pas, M. Hirsch, H.V. Klapdor-Kleingrothaus, S.G. Kovalenko, (Heidelberg, Max Planck Inst.) . 1999.

Published in **Phys.Lett.B453:194-198,1999.**

**155) Lepton and baryon number violation in particle physics, astrophysics and cosmology.**

**Proceedings, 1st International Symposium, Lepton-baryon'98, Trento, Italy, April 20-25, 1998.**

H.V. Klapdor-Kleingrothaus, (ed.), (Heidelberg, Max Planck Inst.) , I.V. Krivosheina, (ed.), (Nizhnii Novgorod, Radiophys. Res. Inst.) . 1999. 760pp.

Prepared for International Symposium on Lepton and Baryon Number Violation, Trento, Italy, 20-25 Apr 1998.

Bristol, UK: IOP (1999) 760 p.

**156) Possibilities of directly detecting dark-matter particles in the next-to-minimal supersymmetric standard model.**

V.A. Bednyakov, (Dubna, JINR) , H.V. Klapdor-Kleingrothaus, (Heidelberg, Max Planck Inst.) . 1999.

Published in **Phys.Atom.Nucl.62:966-974,1999, Yad.Fiz.62:1033-1041,1999.**

**157) Double beta decay with Ge-detectors - and the future of double beta and dark matter search (GENIUS).**

H.V. Klapdor-Kleingrothaus, (Heidelberg, Max Planck Inst.) . 1999.

Prepared for 18th International Conference on Neutrino Physics and Astrophysics (NEUTRINO 98), Takayama, Japan, 4-9 Jun 1998.

Published in **Nucl.Phys.Proc.Suppl.77:357-368,1999.**

**158) Dark matter in astrophysics and particle physics 1998. Proceedings, 2nd International Conference, Heidelberg, Germany, July 20-25, 1998.**

H.V. Klapdor-Kleingrothaus, (ed.), L. Baudis, (ed.), (Heidelberg, Max Planck Inst.) . 1999. 871pp. Bristol, UK: IOP (1999) 871 p.

159) Physics beyond the standard model. Proceedings, 5th International WEIN Symposium, Santa Fe, USA, June 14-19, 1998.

P. Herczeg, (ed.), C.M. Hoffman, (ed.), (Los Alamos) , H.V. Klapdor-Kleingrothaus, (ed.), (Heidelberg, Max Planck Inst.) . 1999. 784pp.

Prepared for 5th International WEIN Symposium: A Conference on Physics Beyond the Standard Model (WEIN 98), Santa Fe, New Mexico, 14-21 Jun 1998.

Published in Singapore, Singapore: World Scientific (1999) 784 p

160) The GENIUS project: Background and technical studies.

B. Majorovits, L. Baudis, G. Heusser, Yorck Alexander Ramachers, H. Strecker, H.V. Klapdor-Kleingrothaus, (Heidelberg, Max Planck Inst.) . Nov 1998. 8pp.

Talk presented by Bela Majorovits.

To be published in the proceedings of 2nd International Workshop on the Identification of Dark Matter (IDM 98), Buxton, England, 7-11 Sep 1998.

Published in \*Buxton 1998, The identification of dark matter\* 620-627

e-Print: [hep-ex/9811022](#)

161) Background and technical studies for GENIUS as a dark matter experiment.

L. Baudis, G. Heusser, B. Majorovits, Yorck Alexander Ramachers, H. Strecker, H.V. Klapdor-Kleingrothaus, (Heidelberg, Max Planck Inst.) . Nov 1998. 20pp.

Published in [Nucl.Instrum.Meth.A426:425-435,1999](#).

e-Print: [hep-ex/9811040](#)

162) New limits on dark matter WIMPs from the Heidelberg - Moscow experiment.

L. Baudis *et al.* Nov 1998. 8pp.

Published in [Phys.Rev.D59:022001,1999](#).

e-Print: [hep-ex/9811045](#)

163) Weak interaction rates at high temperatures and densities.

J.U. Nabi, H.V. Klapdor-Kleingrothaus, (Heidelberg, Max Planck Inst.) . Nov 1998.

Prepared for Conference on Particle Physics and the Early Universe (COSMO 98), Asilomar, California, 15-20 Nov 1998.

Published in [AIP Conf.Proc.478:230-233,1999](#).

164) Future of double beta decay and dark matter searches - GENIUS.

H.V. Klapdor-Kleingrothaus, L. Baudis, G. Heusser, I.V. Krivosheina, S. Kolb, B. Majorovits, J.U. Nabi, H. Pas, (Heidelberg, Max Planck Inst.) . Nov 1998.

Prepared for Conference on Particle Physics and the Early Universe (COSMO 98), Asilomar, California, 15-20 Nov 1998.

Published in [AIP Conf.Proc.478:383-387,1999](#).

165) Improved bounds on SUSY accompanied neutrinoless double beta decay.

H. Pas, M. Hirsch, H.V. Klapdor-Kleingrothaus, (Heidelberg, Max Planck Inst.) . Oct 1998. 7pp.

Published in [Phys.Lett.B459:450-454,1999](#).

e-Print: [hep-ph/9810382](#)

**166) Test of special relativity and equivalence principle from neutrinoless double beta decay.**  
H.V. Klapdor-Kleingrothaus, H. Pas, (Heidelberg, Max Planck Inst.) , U. Sarkar, (DESY & Ahmedabad, Phys. Res. Lab) . Sep 1998. 4pp.  
Published in **Eur.Phys.J.A5:3-6,1999**.  
e-Print: **hep-ph/9809396**

**167) Limitations of modulation analysis for dark matter direct detection experiments.**  
Yorck Alexander Ramachers, (Oxford U.) , M. Hirsch, H.V. Klapdor-Kleingrothaus, (Heidelberg, Max Planck Inst.) . Sep 1998.  
Prepared for 2nd International Workshop on the Identification of Dark Matter (IDM 98), Buxton, England, 7-11 Sep 1998.  
Published in \*Buxton 1998, The identification of dark matter\* 413-418

**168) Next-to-minimal supersymmetric standard model and direct dark matter detection.**  
V.A. Bednyakov, (Dubna, JINR) , H.V. Klapdor-Kleingrothaus, (Heidelberg, Max Planck Inst.) . Jul 1998. 13pp.  
To be published in the proceedings of 2nd International Conference on Dark Matter in Astro and Particle Physics (DARK98), Heidelberg, Germany, 20-25 Jul 1998.  
In \*Heidelberg 1998, Dark matter in astrophysics and particle physics 1998\* 559-571.  
e-Print: **hep-ph/9809271**

**169) Status and perspectives of double beta decay and dark matter search: Windows to new physics.**  
H.V. Klapdor-Kleingrothaus, (Heidelberg, Max Planck Inst.) . Jun 1998.  
Prepared for 5th International WEIN Symposium: A Conference on Physics Beyond the Standard Model (WEIN 98), Santa Fe, New Mexico, 14-21 Jun 1998.  
Published in \*Santa Fe 1998, Physics beyond the standard model\* 275-311

**170) Double beta and dark matter search: Window to new physics beyond the standard model of particle physics.**  
H.V. Klapdor-Kleingrothaus, (Heidelberg, Max Planck Inst.) . Apr 1998. 51pp.  
To be published in the proceedings of International Symposium on Lepton and Baryon Number Violation, Trento, Italy, 20-25 Apr 1998.  
In \*Trento 1998, Lepton and baryon number violation\* 251-301, In \*Klapdor-Kleingrothaus, H.V. (ed.): Sixty years of double beta decay\* 1145-1195.  
e-Print: **hep-ex/9901021**

**171) New physics potential of double beta decay and dark matter search.**  
H.V. Klapdor-Kleingrothaus, H. Pas, (Heidelberg, Max Planck Inst.) . Mar 1998. 11pp.  
Talk given at 6th International Symposium on Particles, Strings and Cosmology (PASCOS 98), Boston, MA, 22-27 Mar 1998.  
Published in \*Boston 1998, Particles, strings and cosmology\* 165-175  
e-Print: **hep-ph/9808350**

**172) Double beta decay and dark matter search: Window to new physics now, and in future (GENIUS).**  
H.V. Klapdor-Kleingrothaus, (Heidelberg, Max Planck Inst.) . Feb 1998. 47pp.  
Published in: Beyond the Desert. Edited by H.V. Klapdor-Kleingrothaus, H. Paes, IOP Bristol & Philadelphia, 1997, p. 485.  
e-Print: **hep-ex/9802007**

**173) About direct dark matter detection in next-to-minimal supersymmetric standard model.**

V.A. Bednyakov, (Dubna, JINR) , H.V. Klapdor-Kleingrothaus, (Heidelberg, Max Planck Inst.) . Feb 1998. 12pp.

Published in **Phys.Rev.D59:023514,1999**.

e-Print: **hep-ph/9802344**

**174) A Large scale double beta and dark matter experiment: GENIUS.**

J. Hellmig, H.V. Klapdor-Kleingrothaus, (Heidelberg, Max Planck Inst.) . Jan 1998. 22pp.

Published in **Z.Phys.A359:351-359,1997**.

e-Print: **nucl-ex/9801004**

**175) Phenomenological implications of 'Majorana' sneutrinos at future accelerators.**

M. Hirsch, H.V. Klapdor-Kleingrothaus, S. Kolb, (Heidelberg, Max Planck Inst.) , S.G. Kovalenko, (Dubna, JINR) . 1998.

Published in **Phys.Rev.D57:2020-2023,1998**.

**176) Future perspectives of double beta decay and dark matter search - GENIUS.**

H.V. Klapdor-Kleingrothaus, J. Hellmig, M. Hirsch, (Heidelberg, Max Planck Inst.) . 1998.

Published in **J.Phys.G24:483-516,1998**.

**177) Experiments aiming at direct detection of dark matter.**

H.V. Klapdor-Kleingrothaus, Yorck Alexander Ramachers, (Heidelberg, Max Planck Inst.) . 1998.

Published in **Eur.Phys.J.A3:85-92,1998**.

**178) Limitations of modulation analysis for dark matter direct detection experiments.**

Yorck Alexander Ramachers, M. Hirsch, H.V. Klapdor-Kleingrothaus, (Heidelberg, Max Planck Inst.) . 1998.

Published in **Eur.Phys.J.A3:93-98,1998**.

**179) Status and perspectives of double beta decay: Window to new physics beyond the standard model of particle physics.**

H.V. Klapdor-Kleingrothaus, (Heidelberg, Max Planck Inst.) . 1998.

Published in **Int.J.Mod.Phys.A13:3953-3992,1998**.

**180) Ice shielding in the large scale GENIUS experiment for double beta decay and dark matter search.**

H.V. Klapdor-Kleingrothaus, (Heidelberg, Max Planck Inst.) , Yu.G. Zdesenko, (Kiev, INR) . 1998.

Published in **Eur.Phys.J.A3:107-108,1998**.

**181) Double-beta decay: Physics beyond the standard model now and in the future (GENIUS).**

H.V. Klapdor-Kleingrothaus, (Heidelberg, Max Planck Inst.) . 1998.

Prepared for COSMO 97: 1st International Workshop on Particle Physics and the Early Universe, Ambleside, England, 15-19 Sep 1997.

Published in **Phys.Atom.Nucl.61:875-885,1998, Yad.Fiz.61:967-977,1998**.

182) Masses of Majorana-like sneutrinos in neutrinoless double beta decay and at future colliders.

M. Hirsch, H.V. Klapdor-Kleingrothaus, S. Kolb, (Heidelberg, Max Planck Inst.) , S. Kovalenko, (Dubna, JINR) . 1998.

Given at 1st International Workshop on Nonaccelerator New Physics (NANP 97), Dubna, Moscow Region, Russia, 7-11 Jul 1997.

Published in **Phys.Atom.Nucl.61:991-997,1998, Yad.Fiz.61:1085-1091,1998.**

183) Direct detection of WIMPs with the HDMS-experiment and new WIMP-limits from the Heidelberg-Moscow experiment.

L. Baudis, J. Hellmig, G. Heusser, H.V. Klapdor-Kleingrothaus, B. Majorovits, Yorck Alexander Ramachers, H. Strecker, (Heidelberg, Max Planck Inst.) . 1998. 5pp.

Given at 3rd International Symposium on Sources and Detection of Dark Matter in the Universe (DM 98), Santa Monica, CA, 18-20 Feb 1998.

Published in **Phys.Rept.307:291-295,1998.**

184) GENIUS: A new dark matter project.

L. Baudis, J. Hellmig, M. Hirsch, G. Heusser, H.V. Klapdor-Kleingrothaus, B. Majorovits, Yorck Alexander Ramachers, H. Strecker, (Heidelberg, Max Planck Inst.) . 1998. 8pp.

Given at 3rd International Symposium on Sources and Detection of Dark Matter in the Universe (DM 98), Santa Monica, CA, 18-20 Feb 1998.

Published in **Phys.Rept.307:301-308,1998.**

185) Dark matter search with the HDMS-experiment.

L. Baudis, J. Hellmig, H.V. Klapdor-Kleingrothaus, Yorck Alexander Ramachers, H. Strecker, (Heidelberg, Max Planck Inst.) . 1998. 2pp.

Given at International School of Nuclear Physics: 19th Course: Neutrinos in Astro, Particle, and Nuclear Physics, Erice, Italy, 16-24 Sep 1997.

Published in **Prog.Part.Nucl.Phys.40:41-42,1998.**

186) Double beta decay - physics beyond the standard model now, and in future (GENIUS).

H.V. Klapdor-Kleingrothaus, (Heidelberg, Max Planck Inst.) . 1998. 18pp.

Given at International School of Nuclear Physics: 19th Course: Neutrinos in Astro, Particle, and Nuclear Physics, Erice, Italy, 16-24 Sep 1997.

Published in **Prog.Part.Nucl.Phys.40:265-282,1998.**

187) Some particle physics aspects of neutrinoless double beta decay.

M. Hirsch, H.V. Klapdor-Kleingrothaus, (Heidelberg, Max Planck Inst.) . 1998. 10pp.

Given at International School of Nuclear Physics: 19th Course: Neutrinos in Astro, Particle, and Nuclear Physics, Erice, Italy, 16-24 Sep 1997.

Published in **Prog.Part.Nucl.Phys.40:323-332,1998.**

188) Direct detection of dark matter in the universe.

H.V. Klapdor-Kleingrothaus, Yorck Alexander Ramachers, (Heidelberg, Max Planck Inst.) . 1998. Prepared for International Symposium on Lepton and Baryon Number Violation, Trento, Italy, 20-25 Apr 1998.

In \*Trento 1998, Lepton and baryon number violation\* 477-486.

**189) Sneutrino physics with lepton number violation.**

S. Kolb, H.V. Klapdor-Kleingrothaus, M. Hirsch, (Heidelberg, Max Planck Inst.) , O. Panella, (INFN, Perugia) . 1998.

Prepared for International Symposium on Lepton and Baryon Number Violation, Trento, Italy, 20-25 Apr 1998.

In \*Trento 1998, Lepton and baryon number violation\* 621-632.

**190) The GENIUS experiment: Background and technical studies.**

L. Baudis, G. Heusser, B. Majorovits, Yorck Alexander Ramachers, H. Strecker, H.V. Klapdor-Kleingrothaus, (Heidelberg, Max Planck Inst.) . 1998.

Prepared for 2nd International Conference on Dark Matter in Astro and Particle Physics (DARK98), Heidelberg, Germany, 20-25 Jul 1998.

In \*Heidelberg 1998, Dark matter in astrophysics and particle physics 1998\* 719-737.

**191) New WIMP-limits from the Heidelberg-Moscow experiment.**

L. Baudis, G. Heusser, H.V. Klapdor-Kleingrothaus, B. Majorovits, Yorck Alexander Ramachers, H. Strecker, (Heidelberg, Max Planck Inst.) . 1998.

Prepared for 2nd International Conference on Dark Matter in Astro and Particle Physics (DARK98), Heidelberg, Germany, 20-25 Jul 1998.

Published in \*Buxton 1998, The identification of dark matter\* 316-322

**192) Double-beta decay - Physics beyond the standard model.**

H.V. Klapdor-Kleingrothaus, (Munich, Max Planck Inst.) . 1998.

Published in **Phys.Unserer Zeit 29:123-130,1998.**

**193) Double beta decay, supersymmetry and lepton number violation.**

M. Hirsch, H.V. Klapdor-Kleingrothaus, (Heidelberg, Max Planck Inst.) , S.G. Kovalenko, (Dubna, JINR) . 1998.

Prepared for 5th International Conference on Supersymmetries in Physics (SUSY 97), Philadelphia, Pennsylvania, 27-31 May 1997.

Published in **Nucl.Phys.Proc.Suppl.62:224-231,1998.** Also in \*Philadelphia 1997, Supersymmetries in physics\* 224-231

**194) Beyond the desert 1997: Accelerator and non-accelerator approaches. Proceedings, 1st International Conference on Particle Physics beyond the Standard Model, Tegernsee, Ringberg Castle, Germany, June 8-14, 1997.**

H.V. Klapdor-Kleingrothaus, (ed.), H. Pas, (ed.), (Heidelberg, Max Planck Inst.) . 1998. 992pp.

Prepared for Workshop on Physics Beyond the Standard Model: Beyond the Desert: Accelerator and Nonaccelerator Approaches, Tegernsee, Germany, 8-14 Jun 1997.

Published in Bristol, UK: IOP (1998) 992 p

**195) Double beta decay: Physics beyond the standard model now, and in future (GENIUS).**

H.V. Klapdor-Kleingrothaus, (Heidelberg, Max Planck Inst.) . Oct 1997. 18pp.

Prepared for International Workshop on Kaon, Muon, and Neutrino Physics and the Future at KEK, Tsukuba, Japan, 31 Oct - 1 Nov 1997.

Published in \*Tsukuba 1997, Kaon, muon, neutrino physics and future\* 287-304

196) A General parametrization for the long range part of neutrinoless double beta decay.  
H. Pas, M. Hirsch, S.G. Kovalenko, H.V. Klapdor-Kleingrothaus, (Heidelberg, Max Planck Inst.) .  
Sep 1997. 2pp.  
Talk given at International School of Nuclear Physics: 19th Course: Neutrinos in Astro, Particle,  
and Nuclear Physics, Erice, Italy, 16-24 Sep 1997.  
Published in **Prog.Part.Nucl.Phys.40:283-284,1998**.  
e-Print: **hep-ph/9712361**

197) Search for new physics with neutrinoless double beta decay.  
H.V. Klapdor-Kleingrothaus, L. Baudis, J. Hellmig, M. Hirsch, S. Kolb, H. Pas, Yorck Alexander  
Ramachers, (Heidelberg, Max Planck Inst.) . Aug 1997. 4pp.  
Talk given at International Europhysics Conference on High-Energy Physics (HEP 97), Jerusalem,  
Israel, 19-26 Aug 1997, and given at 5th International Workshop on Topics in Astroparticle and  
Underground Physics (TAUP 97), Gran Sasso, Italy, 7-11 Sep 1997.  
Published in **Nucl.Phys.Proc.Supp.70:242-245,1999**.  
e-Print: **hep-ph/9712381**

198) R-parity conserving supersymmetry, neutrino mass and neutrinoless double beta decay.  
M. Hirsch, H.V. Klapdor-Kleingrothaus, (Heidelberg, Max Planck Inst.) , S.G. Kovalenko, (Dubna,  
JINR) . Jul 1997. 29pp.  
Published in **Phys.Rev.D57:1947-1961,1998**.  
e-Print: **hep-ph/9707207**

199) A Xenon solar neutrino detector.  
A.Sh. Georgadze, (Kiev, INR) , H.V. Klapdor-Kleingrothaus, H. Pas, (Heidelberg, Max Planck  
Inst.) , Yu.G. Zdesenko, (Kiev, INR) . Jul 1997. 9pp.  
Talk given at 4th International Solar Neutrino Conference, Heidelberg, Germany, 8-11 Apr 1997,  
pp. 283-291.  
Published in **Astropart.Phys.7:173-179,1997**.  
e-Print: **nucl-ex/9707006**

200) Squark mixing and its consequences for R(p) MSSM couplings.  
S.T. Kolb, M. Hirsch, H.V. Klapdor-Kleingrothaus, (Heidelberg, Max Planck Inst.) . PRINT-97-226,  
Jul 1997. 15pp.  
Published in **Phys.Rev.D56:4161-4165,1997**.

201) Towards a superformula for neutrinoless double beta decay.  
H. Pas, (Heidelberg, Max Planck Inst. & Gran Sasso & Gran Sasso) , M. Hirsch, (Heidelberg, Max  
Planck Inst.) , S.G. Kovalenko, (Dubna, JINR) , H.V. Klapdor-Kleingrothaus, (Heidelberg, Max  
Planck Inst.) . Jun 1997. 7pp.  
Talk given at Workshop on Physics Beyond the Standard Model: Beyond the Desert: Accelerator  
and Nonaccelerator Approaches, Tegernsee, Germany, 8-14 Jun 1997.  
In \*Tegernsee 1997, Beyond the desert 1997\* 884-890.  
e-Print: **hep-ph/9804374**

**202) (B-L)-violating masses in supersymmetry and neutrinoless double beta decay.**

M. Hirsch, H.V. Klapdor-Kleingrothaus, (Heidelberg, Max Planck Inst.) , S.G. Kovalenko, (Dubna, JINR) . Jun 1997.

Prepared for Workshop on Physics Beyond the Standard Model: Beyond the Desert: Accelerator and Nonaccelerator Approaches, Tegernsee, Germany, 8-14 Jun 1997.

In \*Tegernsee 1997, Beyond the desert\* 237-244.

**203) Observing Majorana-like sneutrinos at future colliders.**

S. Kolb, M. Hirsch, H.V. Klapdor-Kleingrothaus, (Heidelberg, Max Planck Inst.) , S.G. Kovalenko, (Dubna, JINR) . Jun 1997.

Prepared for Workshop on Physics Beyond the Standard Model: Beyond the Desert: Accelerator and Nonaccelerator Approaches, Tegernsee, Germany, 8-14 Jun 1997.

In \*Tegernsee 1997, Beyond the desert\* 245-253.

**204) Neutrinoless double beta decay and the HERA 'anomaly'.**

M. Hirsch, H.V. Klapdor-Kleingrothaus, (Heidelberg, Max Planck Inst.) , S.G. Kovalenko, (Dubna, JINR) . Jun 1997.

Given at Workshop on Physics Beyond the Standard Model: Beyond the Desert: Accelerator and Nonaccelerator Approaches, Tegernsee, Germany, 8-14 Jun 1997.

In \*Tegernsee 1997, Beyond the desert\* 322-330, In \*Klapdor-Kleingrothaus, H.V. (ed.): Sixty years of double beta decay\* 865-873.

**205) Double beta decay: Physics beyond the standard model now, and in future (GENIUS).**

H.V. Klapdor-Kleingrothaus, (Heidelberg, Max Planck Inst.) . Jun 1997.

Prepared for Workshop on Physics Beyond the Standard Model: Beyond the Desert: Accelerator and Nonaccelerator Approaches, Tegernsee, Germany, 8-14 Jun 1997.

In \*Tegernsee 1997, Beyond the desert\* 485-531.

**206) Future of dark matter direct detection experiments.**

H.V. Klapdor-Kleingrothaus, Yorck Alexander Ramachers, (Heidelberg, Max Planck Inst.) . Jun 1997.

Prepared for Workshop on Physics Beyond the Standard Model: Beyond the Desert: Accelerator and Nonaccelerator Approaches, Tegernsee, Germany, 8-14 Jun 1997.

In \*Tegernsee 1997, Beyond the desert\* 786-801.

**207) The Heidelberg - Moscow Experiment: Improved sensitivity for Ge-76 neutrinoless double beta decay.**

L. Baudis *et al.* Apr 1997.

Published in Phys.Lett.B407:219-224,1997.

**208) B-L violating masses in softly broken supersymmetry.**

M. Hirsch, H.V. Klapdor-Kleingrothaus, (Heidelberg, Max Planck Inst.) , S.G. Kovalenko, (Dubna, JINR) . Jan 1997. 7pp.

Published in Phys.Lett.B398:311-314,1997.

e-Print: hep-ph/9701253

209) B-L violation in softly broken supersymmetry and neutrinoless double beta decay.  
M. Hirsch, H.V. Klapdor-Kleingrothaus, (Heidelberg, Max Planck Inst.) , S.G. Kovalenko, (Dubna, JINR) . Jan 1997. 8pp.  
e-Print: [hep-ph/9701273](#)

210) Heidelberg - Moscow beta-beta experiment with Ge-76: Full setup with five detectors.  
M. Gunther *et al.* 1997.  
Published in **Phys.Rev.D55:54-67,1997**.

211) A large scale double beta and dark matter experiment: On the physics potential of GENIUS.  
[H.V. Klapdor-Kleingrothaus, M. Hirsch, \(Heidelberg, Max Planck Inst.\) . 1997.](#)  
Published in **Z.Phys.A359:361-372,1997**.

212) Lepton number violation in supersymmetry and neutrinoless double beta decay.  
[M. Hirsch, H.V. Klapdor-Kleingrothaus, \(Heidelberg, Max Planck Inst.\) . 1997.](#)  
Given at International Workshop on Physics Beyond the Standard Model: From Theory to Experiment (Valencia 97), Valencia, Spain, 13-17 Oct 1997.  
In \*Valencia 1997, Beyond the standard model\* 157-164.

213) Bounds on leptoquark parameters with nonvanishing leptoquark Higgs couplings.  
[S. Kolb, M. Hirsch, H.V. Klapdor-Kleingrothaus, \(Heidelberg, Max Planck Inst.\) . 1997.](#)  
Published in **Phys.Lett.B391:131-135,1997**.

214) Proposal for a new Ge-semiconductor dark matter detector.  
[L. Baudis, J. Hellmig, H.V. Klapdor-Kleingrothaus, A. Muller, F. Petry, Yorck Alexander Ramachers, H. Strecker, \(Heidelberg, Max Planck Inst.\) . 1997.](#)  
Published in **Nucl.Instrum.Meth.A385:265-267,1997**.

215) Status of the Heidelberg Dark Matter Search (HDMS) experiment.  
[L. Baudis, J. Hellmig, H.V. Klapdor-Kleingrothaus, B. Majorovits, Yorck Alexander Ramachers, H. Strecker, \(Heidelberg, Max Planck Inst.\) . 1997.](#)  
Given at COSMO 97: 1st International Workshop on Particle Physics and the Early Universe, Ambleside, England, 15-19 Sep 1997.  
In \*Ambleside 1997, Particle physics and the early universe\* 219-223.

216) Sneutrino oscillations and neutrinoless double beta decay.  
[M. Hirsch, H.V. Klapdor-Kleingrothaus, \(Heidelberg, Max Planck Inst.\) , S.G. Kovalenko, \(Dubna, JINR\) . 1997.](#)  
Published in **Phys.Lett.B403:291-296,1997**.

217) Particle astrophysics.  
[H.V. Klapdor-Kleingrothaus, \(Heidelberg, Max Planck Inst.\) , K. Zuber, \(Dortmund U.\) . 1997.](#)  
Stuttgart, Germany: Teubner (1997) 487 p, Bristol, UK: IOP (1997) 507 p.

218) Dark matter in astro- and particle physics. Proceedings, International Workshop, DARK'96, Heidelberg, Germany, September 16-20, 1996.

H.V. Klapdor-Kleingrothaus, (Ed.), Yorck Alexander Ramachers, (Ed.), (Heidelberg, Max Planck Inst.) . 1997. 735pp.

Prepared for International Workshop on Aspects of Dark Matter in Astrophysics and Particle Physics, Heidelberg, Germany, 16-20 Sep 1996.

Published in Singapore, Singapore: World Scientific (1997) 735 p

219) Probing physics beyond the standard model with neutrinoless double beta decay.

M. Hirsch, H.V. Klapdor-Kleingrothaus, (Heidelberg, Max Planck Inst.) . 1997.

Prepared for 4th International Conference on Supersymmetries in Physics (SUSY 96), College Park, Maryland, 29 May - 1 Jun 1996.

Published in Nucl.Phys.Proc.Suppl.52A:257-262,1997. Also in \*College Park 1996, Supersymmetry'96\* 257-262

220) Systematic study of nuclear beta decay.

H. Homma, E. Bender, M. Hirsch, K. Muto, H.V. Klapdor-Kleingrothaus, T. Oda, (Tokyo Inst. Tech.) . Dec 1996. 13pp.

Published in Phys.Rev.C54:2972-2985,1996.

221) Prospects of direct detection of superlight neutralino as a dark matter particle.

V.A. Bednyakov, S.G. Kovalenko, (Dubna, JINR) , H.V. Klapdor-Kleingrothaus, (Heidelberg, Max Planck Inst.) . Sep 1996.

Prepared for International Workshop on Aspects of Dark Matter in Astrophysics and Particle Physics, Heidelberg, Germany, 16-20 Sep 1996.

Published in \*Heidelberg 1996, Dark matter in astro- and particle physics\* 370-378

222) The HDMS experiment and principle limitations of modulation analyses.

H.V. Klapdor-Kleingrothaus, Yorck Alexander Ramachers, (Heidelberg, Max Planck Inst.) . Sep 1996.

Prepared for International Workshop on Aspects of Dark Matter in Astrophysics and Particle Physics, Heidelberg, Germany, 16-20 Sep 1996.

Published in \*Heidelberg 1996, Dark matter in astro- and particle physics\* 459-472

223) Supersymmetry, R-parity and dark matter.

M. Hirsch, H.V. Klapdor-Kleingrothaus, (Heidelberg, Max Planck Inst.) . Sep 1996.

Prepared for International Workshop on Aspects of Dark Matter in Astrophysics and Particle Physics, Heidelberg, Germany, 16-20 Sep 1996.

Published in \*Heidelberg 1996, Dark matter in astro- and particle physics\* 640-646

224) Majorana neutrino mass limit from double beta decay.

By Heidelberg-Moscow Collaboration (J. Hellmig *et al.*). Sep 1996.

Prepared for International Workshop on Aspects of Dark Matter in Astrophysics and Particle Physics, Heidelberg, Germany, 16-20 Sep 1996.

Published in \*Heidelberg 1996, Dark matter in astro- and particle physics\* 649-656

225) Heidelberg dark matter search.

L. Baudis, M. Gunther, J. Hellmig, H.V. Klapdor-Kleingrothaus, Yorck Alexander Ramachers, H. Strecker, (Heidelberg, Max Planck Inst.) . Sep 1996.

Prepared for International Workshop on the Identification of Dark Matter (IDM 96), Sheffield, England, 8-11 Sep 1996.

Published in \*Sheffield 1996, The identification of dark matter\* 409-414

26) Superlight neutralino as a dark matter particle candidate.

V.A. Bednyakov, (Dubna, JINR) , H.V Klapdor-Kleingrothaus, (Heidelberg, Max Planck Inst.) , S.G. Kovalenko, (Dubna, JINR) . JINR-E2-96-249, Aug 1996. 20pp.

Published in **Phys.Rev.D55:503-514,1997.**

e-Print: [hep-ph/9608241](#)

227) Aspects of dark matter direct detection.

L. Baudis *et al.* Aug 1996.

Prepared for Cargese Summer School on Masses of Fundamental Particles, Cargese, France, 5-17 Aug 1996.

Published in \*Cargese 1996, Masses of fundamental particles\* 251-257

228) Probing physics beyond the standard model with neutrinoless double beta decay.

M. Hirsch, H.V. Klapdor-Kleingrothaus, (Heidelberg, Max Planck Inst.) , S.G. Kovalenko, (Dubna, JINR) . Jul 1996.

Prepared for 28th International Conference on High-energy Physics (ICHEP 96), Warsaw, Poland, 25-31 Jul 1996.

Published in \*Warsaw 1996, ICHEP'96, vol. 2\* 1426-1429

229) Is SUSY accessible by direct dark matter detection?

V.A. Bednyakov, S.G. Kovalenko, (Dubna, JINR) , H.V. Klapdor-Kleingrothaus, Yorck Alexander Ramachers, (Heidelberg, Max Planck Inst.) . JINR-E2-96-198, Jun 1996. 21pp.

Published in **Z.Phys.A357:339-347,1997.**

e-Print: [hep-ph/9606261](#)

230) Double beta decay - Physics beyond the standard model.

H.V. Klapdor-Kleingrothaus, (Heidelberg, Max Planck Inst.) . Jun 1996.

Prepared for 17th International Conference on Neutrino Physics and Astrophysics (Neutrino 96), Helsinki, Finland, 13-20 Jun 1996.

Published in \*Helsinki 1996, Neutrino '96\* 317-341

231) New leptoquark mechanism of neutrinoless double beta decay.

M. Hirsch, H.V. Klapdor-Kleingrothaus, (Heidelberg, Max Planck Inst.) , S.G. Kovalenko, (Dubna, JINR) . Mar 1996. 6pp.

Published in **Phys.Rev.D54:4207-4210,1996.**

e-Print: [hep-ph/9603213](#)

232) Double beta decay in left-right symmetric models.

M. Hirsch, H.V. Klapdor-Kleingrothaus, (Heidelberg, Max Planck Inst.) , O. Panella, (INFN, Perugia & College de France) . Feb 1996. 9pp.

Published in **Phys.Lett.B374:7-12,1996.**

e-Print: [hep-ph/9602306](#)

233) New low-energy leptoquark interactions.

M. Hirsch, H.V. Klapdor-Kleingrothaus, (Heidelberg, Max Planck Inst.) , S.G. Kovalenko, (Dubna, JINR) . Feb 1996. 9pp.

Published in **Phys.Lett.B378:17-22,1996**.

e-Print: [hep-ph/9602305](#)

234) Double beta decay and related topics. Proceedings, International Workshop, Trento, Italy, April 24-May 5, 1995.

H.V. Klapdor-Kleingrothaus, (ed.), (Heidelberg, Max Planck Inst.) , S. Stoica, (ed.), (Bucharest U.) . 1996.

Singapore, Singapore: World Scientific (1996) 509 p.

235) Large volume CdWO-4 crystal scintillators.

S.F. Burachas *et al.* 1996.

Published in **Nucl.Instrum.Meth.A369:164-168,1996**.

236) Investigation of beta+ beta+ and beta+/EC decay of Cd-106.

Fedor A. Danevich *et al.* 1996.

Published in **Z.Phys.A355:433-437,1996**.

237) Prospects in searches for cosmic dark matter in underground experiments.

V.A. Bednyakov, S.G. Kovalenko, (Dubna, JINR) , H.V. Klapdor-Kleingrothaus, (Heidelberg, Max Planck Inst.) . 1996.

Published in **Phys.Atom.Nucl.59:1718-1727,1996, Yad.Fiz.59:1777-1787,1996**.

238) Double beta decay: Physics at beyond accelerator energies.

H.V. Klapdor-Kleingrothaus, (Heidelberg, Max Planck Inst.) . 1996.

Prepared for International Workshop on Future Prospects of Baryon Instability Search in p decay and n ---> anti-n Oscillation Experiments, Oak Ridge, TN, 28-30 Mar 1996.

Published in \*Trento 1995, Double-beta decay and related topics\* 3-43

239) On the SUSY accompanied neutrino exchange mechanism of neutrinoless double beta decay.

M. Hirsch, H.V. Klapdor-Kleingrothaus, (Heidelberg, Max Planck Inst.) , S.G. Kovalenko, (Dubna, JINR) . Dec 1995. 10pp.

Published in **Phys.Lett.B372:181-186,1996, Erratum-ibid.B381:488,1996**.

e-Print: [hep-ph/9512237](#)

240) Bounds on new majoron models from the Heidelberg - Moscow experiment.

By Heidelberg - Moscow-Collaboration (J. Bockholt *et al.*). Nov 1995. 8pp.

Published in **Phys.Rev.D54:3641-3644,1996**.

e-Print: [nucl-ex/9511001](#)

241) On the observability of majoron emitting double beta decays.

M. Hirsch, H.V. Klapdor-Kleingrothaus, S.G. Kovalenko, H. Pas, (Heidelberg, Max Planck Inst.) . Nov 1995. 12pp.

Published in **Phys.Lett.B372:8-14,1996**.

e-Print: [hep-ph/9511227](#)

**242) Double beta decay and dark matter search with enriched Ge detectors.**

By Heidelberg-Moscow Collaboration ([H.V. Klapdor-Kleingrothaus](#) for the collaboration). Jun 1995.

Prepared for 4th International Symposium on Weak and Electromagnetic Interaction in Nuclei (WEIN 95), Osaka, Japan, 12-16 Jun 1995.

In \*Osaka 1995, Weak and electromagnetic interactions in nuclei\* 174-183.

**243) Supersymmetry and neutrinoless double beta decay.**

[M. Hirsch](#), [H.V. Klapdor-Kleingrothaus](#), (Heidelberg, Max Planck Inst.) , [S.G. Kovalenko](#), (Dubna, JINR) . Jun 1995.

Prepared for 4th International Symposium on Weak and Electromagnetic Interaction in Nuclei (WEIN 95), Osaka, Japan, 12-16 Jun 1995.

In \*Osaka 1995, Weak and electromagnetic interactions in nuclei\* 217-222.

**244) Expectations for supersymmetric dark matter searches underground.**

[V.A. Bednyakov](#), (Dubna, JINR) , [H.V. Klapdor-Kleingrothaus](#), (Heidelberg, Max Planck Inst.) , [S.G. Kovalenko](#), (Dubna, JINR) . Apr 1995. 17pp.

Presented at Workshop on Double Beta Decay and Related Topics, Trento, Italy, Apr 24-27, 1995.

Published in Double Beta Decay 1995:0304-322 ([QCD162:B4:1995](#))

e-Print: [hep-ph/9510292](#)

**245) Sub-eV limit for the neutrino mass from Ge-76 double beta decay by the HEIDELBERG-MOSCOW experiment.**

[J. Hellmig](#) et al. Apr 1995.

Prepared for International School on Particles and Cosmology (Baksan School 95), Baksan, Russia, 19-27 Apr 1995.

In \*Baksan Valley 1995, Particles and cosmology\* 128-137.

**246) The R-parity violating supersymmetric mechanism of neutrinoless double beta decay.**

[M. Hirsch](#), [H.V. Klapdor-Kleingrothaus](#), (Heidelberg, Max Planck Inst.) , [S.G. Kovalenko](#), (Dubna, JINR) . Apr 1995.

Prepared for International Workshop on Neutrinoless Double Beta Decay and Related Topics, Trento, Italy, 24 Apr - 5 May 1995.

Published in \*Trento 1995, Double-beta decay and related topics\* 91-109

**247) On the observability of Majoron emitting double beta decays.**

[J. Hellmig](#), [M. Hirsch](#), [H.V. Klapdor-Kleingrothaus](#), [B. Maier](#), [H. Pas](#), (Heidelberg, Max Planck Inst.) . Apr 1995.

Prepared for International Workshop on Neutrinoless Double Beta Decay and Related Topics, Trento, Italy, 24 Apr - 5 May 1995.

Published in \*Trento 1995, Double-beta decay and related topics\* 130-144

**248) Constraints on left-right symmetric models from neutrinoless double beta decay.**

[M. Hirsch](#), [H.V. Klapdor-Kleingrothaus](#), (Heidelberg, Max Planck Inst.) . Apr 1995.

Prepared for International Workshop on Neutrinoless Double Beta Decay and Related Topics, Trento, Italy, 24 Apr - 5 May 1995.

Published in \*Trento 1995, Double-beta decay and related topics\* 175-191

**249) The HEIDELBERG-MOSCOW beta beta experiment with Ge-76: Final setup.**

M. Gunther *et al.* Apr 1995.

Prepared for International Workshop on Neutrinoless Double Beta Decay and Related Topics, Trento, Italy, 24 Apr - 5 May 1995.

Published in \*Trento 1995, Double-beta decay and related topics\* 455-474

**250) New supersymmetric contributions to neutrinoless double beta decay.**

M. Hirsch, H.V. Klapdor-Kleingrothaus, (Heidelberg, Max Planck Inst.) , S.G. Kovalenko, (Dubna, JINR) . Feb 1995. 15pp.

Published in Phys.Lett.B352:1-7,1995. (Revised version in journal)

e-Print: hep-ph/9502315

**251) Supersymmetry and neutrinoless double beta decay.**

M. Hirsch, H.V. Klapdor-Kleingrothaus, (Heidelberg, Max Planck Inst.) , S.G. Kovalenko, (Dubna, JINR) . MPI-H-V6-1995, Feb 1995. 44pp.

Published in Phys.Rev.D53:1329-1348,1996.

e-Print: hep-ph/9502385

**252) Test of supersymmetry: Double beta decay and particle accelerators. (In German).**

M. Hirsch, H.V. Klapdor-Kleingrothaus, (Heidelberg, Max Planck Inst.) , S.G. Kovalenko, (Dubna, JINR) . 1995.

Published in Phys.Bl.51:418-419,1995.

**253) New constraints on R-parity broken supersymmetry from neutrinoless double beta decay.**

M. Hirsch, H.V. Klapdor-Kleingrothaus, (Heidelberg, Max Planck Inst.) , S.G. Kovalenko, (Dubna, JINR) . 1995.

Published in Phys.Rev.Lett.75:17-20,1995.

**254) SubeV limit for the neutrino mass from Ge-76 double beta decay by the Heidelberg - Moscow experiment.**

A. Balysh *et al.* 1995.

Published in Phys.Lett.B356:450-455,1995.

**255) Particle physics without accelerators. (In German).**

H.V. Klapdor-Kleingrothaus, A. Staudt, . 1995.

Stuttgart, Germany: Teubner (1995) 575 p. (Teubner Studienbuecher: Physik).

**256) Extended operator expansion method for neutrinoless double beta decay.**

M. Hirsch, O. Kadowaki, K. Muto, T. Oda, (Tokyo Inst. Tech.) , H.V. Klapdor-Kleingrothaus, (Heidelberg, Max Planck Inst.) . 1995.

Published in Z.Phys.A352:33-45,1995.

**257) Background identification by digital pulse shape analysis.**

J. Hellmig, H.V. Klapdor-Kleingrothaus, F. Petry, (Heidelberg, Max Planck Inst.) . 1995.

Prepared for 4th International Workshop on Theoretical and Phenomenological Aspects of Underground Physics (TAUP 95), Toledo, Spain, 17-21 Sep 1995.

Published in Nucl.Phys.Proc.Supp.48:254-256,1996.

**258) Double beta decay: Physics at beyond accelerator energies.**

H.V. Klapdor-Kleingrothaus, (Heidelberg, Max Planck Inst.) . 1995.

Prepared for 4th International Workshop on Theoretical and Phenomenological Aspects of Underground Physics (TAUP 95), Toledo, Spain, 17-21 Sep 1995.

Published in **Nucl.Phys.Proc.Suppl.48:216-222,1996.**

**259) Non-accelerator particle physics.**

H.V. Klapdor-Kleingrothaus, (Heidelberg, Max Planck Inst.) , A. Staudt, . 1995. 534pp.

Bristol, UK: IOP (1995) 534 p.

**260) Breakthrough into the sub eV neutrino mass range: Status of the Heidelberg - Moscow double beta decay experiment with enriched Ge-76.**

A. Balysh *et al.* Jul 1994. 4pp.

27th International Conference on High Energy Physics (ICHEP), Glasgow, Scotland, 20-27 Jul 1994.

Published in ICHEP 1994:0939-942 ([QCD161:H51:1994](#))

e-Print: [hep-ex/9502007](#)

**261) On SUSY dark matter detection with spinless nuclei.**

V.A. Bednyakov, (Dubna, JINR) , H.V. Klapdor-Kleingrothaus, (Heidelberg, Max Planck Inst.) , S. Kovalenko, (Dubna, JINR) . JINR-E2-93-448, Jan 25, 1994. (Published Jan 1994). 19pp.

Published in **Phys.Rev.D50:7128-7143,1994.**

e-Print: [hep-ph/9401262](#)

**262) Possible constraints on SUSY model parameters from direct dark matter search.**

V.A. Bednyakov, (Dubna, JINR) , H.V. Klapdor-Kleingrothaus, (Heidelberg, Max Planck Inst.) , S.G. Kovalenko, (Dubna, JINR) . JINR-E2-93-447, Jan 19, 1994. (Published Jan 1994). 10pp.

Published in **Phys.Lett.B329:5-9,1994.**

e-Print: [hep-ph/9401271](#)

**263) The Heidelberg-Moscow beta beta experiment with Ge-76 and the present status in double beta decay research.**

M. Beck *et al.* Jan 1994.

Prepared for 29th Rencontres de Moriond: Particle Astrophysics: Perspectives in Particle Physics, Atomic Physics and Gravitation, Villars-sur-Ollon, Switzerland, 22-29 Jan 1994.

In \*Villars-sur-Ollon 1994, Particle astrophysics, atomic physics and gravitation\* 251-258.

**264) Measurement of the beta beta two neutrino decay of Ge-76.**

A. Balysh *et al.* 1994.

Published in **Phys.Lett.B322:176-181,1994.**

**265) Nuclear structure calculations of beta+ beta+, beta+ / EC and EC / EC decay matrix elements.**

M. Hirsch, K. Muto, T. Oda, (Tokyo Inst. Tech.) , H.V. Klapdor-Kleingrothaus, (Heidelberg, Max Planck Inst.) . 1994.

Published in **Z.Phys.A347:151-160,1994.**

266) Operator expansion method and nuclear beta beta decay.

X.R. Wu, M. Hirsch, H.V. Klapdor-Kleingrothaus, (Heidelberg, Max Planck Inst.) , Cheng-Rui Ching, Tso-Hsiu Ho, (CCAST World Lab, Beijing & Beijing, Inst. Theor. Phys.) . 1994. 20pp.  
Published in **Phys.Rept.242:403-422,1994**.

267) Investigation of the beta beta decay of Cd-116 into excited states of Sn-116.

A. Piepke *et al.* 1994. 18pp.  
Published in **Nucl.Phys.A577:493-510,1994**.

268) Search in the tunnel. (In German).

H.V. Klapdor-Kleingrothaus, (Heidelberg, Max Planck Inst.) . 1994.  
Published in MPG Spiegel (1994) No. 6 6-10.

269) Double beta decay and neutrino mass: The Heidelberg-Moscow experiment.

By Heidelberg-Moscow Collaboration (H.V. Klapdor-Kleingrothaus *for the collaboration*). 1994.  
20pp.

Given at International School on Nuclear Physics: 15th Course: Neutrinos in Cosmology,  
Astroparticle and Nuclear Physics, Erice, Italy, 8-17 Sep 1993.

Published in **Prog.Part.Nucl.Phys.32:261-280,1994**.

270) Searching for double beta decay and dark matter with the Heidelberg-Moscow beta-beta experiment.

A. Balysh *et al.* 1994.

Prepared for Astrophysics Symposium on Dark Matter: Critique of the Sources of Dark Matter in  
the Universe (Note change of place from Santa Monica) (To be held in conjunction with Workshop  
on Strategies of the Detection of Dark Matter Particles, 20-23 Feb 1994, Berkely, Los Angeles, CA,  
16-18 Feb 1994.

In \*Bel Air 1994, Sources of dark matter in the universe\* 296-302.

271) Searching in the tunnel: German-Russian experiment on neutrinos and dark matter.

H.V. Klapdor-Kleingrothaus, (Heidelberg, Max Planck Inst.) . 1994.  
Published in **MPG Spiegel 6:6-10,1994**.

272) Introductory remarks: Workshop session on double beta decay.

H.V. Klapdor-Kleingrothaus, (Heidelberg, Max Planck Inst.) . 1994.

Prepared for 3rd International Workshop on Theoretical and Phenomenological in Astroparticle and  
Underground Physics (TAUP 93), Assergi, Italy, 19-23 Sep 1993.

Published in **Nucl.Phys.Proc.Supp.35:351-353,1994**.

273) Double beta decay and neutrino mass: The Heidelberg - Moscow Experiment.

H.V. Klapdor-Kleingrothaus, (Heidelberg, Max Planck Inst.) . FPRINT-93-96, Dec 20, 1993. H.V.  
Klapdor-KleingrothausDec 1993). 12pp.

Invited lecture at NATO Advanced Study Institutes Program, Frontier Topics in Nuclear Physics,  
Predeal, Romania, 24 Aug - 4 Sep 1993 In press-Plenum.

274) The Heidelberg - Moscow Double Beta Experiment with enriched Ge-76: Status and perspectives.

By Heidelberg - Moscow Collaboration ([H.V. Klapdor-Kleingrothaus](#) for the collaboration). FPRINT-93-98, Dec 20, 1993. Dec 1993). 7pp.

Talk presented at 13th Int. Conf. on Particles and Nuclei, Perugia, Italy, 28 Jun - 2 Jul 1993. In \*Perugia 1993, PAN 13, particles and nuclei\* 283-289.

275) Double beta decay and neutrino mass. The Heidelberg - Moscow Experiment.

[H.V. Klapdor-Kleingrothaus](#), (Heidelberg, Max Planck Inst.) . MPI-H-V34-92, Dec 20, 1993. (Published Dec 1993). 40pp.

Invited talk at 27th Zakopane School of Nuclear Physics, Zakopane, Poland, 30 Aug - 8 Sep 1992. Published in **Acta Phys.Polon.B24:189-228,1993**.

276) Searching for dark matter with the enriched detectors of the Heidelberg - Moscow Double Beta Decay Experiment.

[M. Beck et al.](#) FPRINT-93-97, Jul 1993. 11pp.

Published in **Phys.Lett.B336:141-146,1994**. (Revised version in journal)

277) New theoretical results of two neutrino Beta-Beta decay with the operator expansion method.

[X.R. Wu, M. Hirsch, A. Staudt, H.V. Klapdor-Kleingrothaus](#), (Heidelberg, Max Planck Inst.) , Cheng-Rui Ching, Tso-Hsiu Ho, (CCAST World Lab, Beijing & Beijing, Inst. Theor. Phys.) . AS-ITP-93-19, Apr 1993. 11pp.

Prepared for International School of Cosmology and Gravitation, 13th Course: Cosmology and Particle Physics, Erice, Italy, 3-14 May 1993.

In \*Erice 1993, Cosmology and particle physics\* 279-287.

278) New experimental limits for electron decay and charge conservation.

[A. Balysh et al.](#) 1993.

Published in **Phys.Lett.B298:278-282,1993**.

279) The End of the 17-keV neutrino? (In German).

[K. Zuber, H.V. Klapdor-Kleingrothaus](#), (Heidelberg, Max Planck Inst.) . 1993.

Published in **Phys.Bl.49:125-126,1993**.

280) Investigation of the Majoron accompanied double beta decay mode of Ge-76.

[M. Beck et al.](#) 1993.

Published in **Phys.Rev.Lett.70:2853-2855,1993**.

281) Matrix elements for 0 neutrino beta-beta decay calculated with the operator expansion method and QRPA wave functions.

[M. Hirsch, X.R. Wu, H.V. Klapdor-Kleingrothaus](#), (Heidelberg, Max Planck Inst.) , Cheng-Rui Ching, Tso-Hsiu Ho, (CCAST World Lab, Beijing & Beijing, Inst. Theor. Phys.) . 1993.

Published in **Z.Phys.A345:163-169,1993**.

282) Effects of nuclear structure in the spin dependent scattering of weakly interacting massive particles.

M.A. Nikolaev, (Moscow Phys. Eng. Inst.) , H.V. Klapdor-Kleingrothaus, (Heidelberg, Max Planck Inst.) . 1993.

Published in **Z.Phys.A345:183-186,1993.**

283) Background recognition in Ge detectors by pulse shape analysis.

F. Petry *et al.* 1993.

Published in **Nucl.Instrum.Meth.A332:107-112,1993.**

284) Quenching of the spin dependent scattering of weakly interacting massive particles on heavy nuclei.

M.A. Nikolaev, H.V. Klapdor-Kleingrothaus, (Heidelberg, Max Planck Inst.) . 1993.

Published in **Z.Phys.A345:373-376,1993.**

285) New theoretical results of 2 neutrino beta beta decay with the operator expansion method.

X.R. Wu, M. Hirsch, A. Staudt, H.V. Klapdor-Kleingrothaus, (Heidelberg, Max Planck Inst.) , Cheng-Rui Ching, Tso-Hsiu Ho, (CCAST World Lab, Beijing & Beijing, Inst. Theor. Phys.) . 1993.  
Published in **Commun.Theor.Phys.20:453-460,1993.**

286) Measurement of the beta beta 2nu decay of 76-Ge.

A. Piepke *et al.* 1993.

Prepared for 28th Rencontres de Moriond: Perspectives in Neutrinos, Atomic Physics and Gravitation, Villars sur Ollon, Switzerland, 30 Jan - 6 Feb 1993.

In \*Villars sur Ollon 1993, Perspectives in neutrinos, atomic physics and gravitation\* 287-293.

287) The Heidelberg-Moscow double beta decay experiment using enriched Ge-76.

M. Beck *et al.* Dec 1992.

Prepared for 16th Texas Symposium on Relativistic Astrophysics and 3rd Particles, Strings, and Cosmology Symposium (TEXAS / PASCOS 92), Berkeley, California, 13-18 Dec 1992.  
Published in \*Berkeley 1992, Relativistic astrophysics and particle cosmology\* 509-514

288) Beta decay far from stability and double beta decay, and consequences for astrophysics.

H.V. Klapdor- Kleingrothaus, (Heidelberg, Max Planck Inst.) . 1992.

In \*Oberhummer, H. (ed.): Nuclei in the cosmos\* 199-232.

289) Tensor force and operator expansion method for nuclear double beta decay.

X.R. Wu, A. Staudt, T.T.S. Kuo, H.V. Klapdor- Kleingrothaus, (Heidelberg, Max Planck Inst.) . 1992.

Published in **Phys.Lett.B276:274-278,1992.**

290) The Heidelberg - Moscow double beta decay experiment with enriched Ge-76: First results.

A. Balysh *et al.* 1992.

Published in **Phys.Lett.B283:32-36,1992.**

291) New halflife limits for the beta-beta (2 neutrino + 0 neutrino) decay of Ge-76 to the excited states of Se-76 from the Heidelberg - Moscow beta-beta experiment.

M. Beck *et al.* 1992.

Published in **Z.Phys.A343:397-400,1992.**

292) beta beta decay of Te-128, Te-130, and Ge-76 with renormalized effective interactions derived from Paris and Bonn potentials.

A. Staudt, T.T.S. Kuo, H.V. Klapdor-Kleingrothaus, (Heidelberg, Max Planck Inst.) . 1992.

Published in **Phys.Rev.C46:871-883,1992.**

293) Search for the Majoron. (In German).

H.V. Klapdor-Kleingrothaus, K. Zuber, (Heidelberg, Max Planck Inst.) . 1992.

Published in **Phys.BI.48:1017-1018,1992.**

294) Recent double beta decay results.

A. Piepke *et al.* 1992.

In \*Dallas 1992, Proceedings, High energy physics, vol. 1\* 1141-1147.

295) Neutrino masses from terrestrial experiments.

H.V. Klapdor-Kleingrothaus, (Heidelberg, Max Planck Inst.) . 1992.

Prepared for 4th International Symposium on Neutrino Telescopes, Venice, Italy, 10-13 Mar 1992.

In \*Venice 1992, Neutrino telescopes\* 113-155.

296) The Heidelberg - Moscow double beta experiment with enriched Ge-76: First results.

A. Piepke *et al.* 1992.

Prepared for 15th International Conference on Neutrino Physics and Astrophysics (Neutrino '92), Granada, Spain, 7-12 Jun 1992.

Published in **Nucl.Phys.Proc.Suppl.31:72-75,1993.**

297) Double beta decay, nuclear structure and neutrino mass: The Heidelberg-Moscow experiment.

H.V. Klapdor-Kleingrothaus, (Heidelberg, Max Planck Inst.) . 1992.

Given at 3rd International Symposium on Weak and Electromagnetic Interactions in Nuclei (WEIN 92), Dubna, USSR, 16-22 Jun 1992.

In \*Dubna 1992, Weak and electromagnetic interactions in nuclei\* 201-236.

298) Quenching of the spin dependent scattering of weakly interacting massive particles on heavy nuclei.

M.A. Nikolaev, H.V. Klapdor-Kleingrothaus, (Moscow Phys. Eng. Inst. & Heidelberg, Max Planck Inst.) . 1992.

Given at 3rd International Symposium on Weak and Electromagnetic Interactions in Nuclei (WEIN 92), Dubna, USSR, 16-22 Jun 1992.

In \*Dubna 1992, Weak and electromagnetic interactions in nuclei\* 498-504.

299) The Heidelberg-Moscow double beta decay experiment with enriched Ge-76: First results.

By Heidelberg-Moscow Collaboration ([H.V. Klapdor-Kleingrothaus for the collaboration](#)). 1992.

Prepared for 2nd International Workshop on Theoretical and Phenomenological Aspects of Underground Physics (TAUP 91), Toledo, Spain, 9-13 Sep 1991.

Published in [Nucl.Phys.Proc.Suppl.28A:207-209,1992](#). Also in \*Toledo 1991, TAUP 91\* 207-209

300) The Heidelberg-Moscow double beta decay experiment with enriched Ge-76: First results.

[H.V. Klapdor-Kleingrothaus](#), (Heidelberg, Max Planck Inst.) . Jul 1991.

Prepared for Joint International Lepton Photon Symposium at High Energies (15th) and European Physical Society Conference on High-energy Physics, Geneva, Switzerland, 25 Jul - 1 Aug 1991.

Published in [Conf.Proc.C910725V1:667-669,1991](#). Also in \*Geneva 1991, Lepton-Photon Symposium, vol. 1\* 667-669

301) Summary talk on 'Rare nuclear decays and fundamental processes.'

[H.V. Klapdor- Kleingrothaus](#), (Heidelberg, Max Planck Inst.) . 1991.

Preprint - Klapdor-Kleingrothaus, H.V. (rec.Nov.91) 7 p.B.

302) Double beta decay, neutrino mass and nuclear structure.

[H.V. Klapdor- Kleingrothaus](#), (Heidelberg, Max Planck Inst.) . 1991. 8pp.

Published in [J.Phys.G17:S129-S136,1991](#).

303) Spectroscopy with enriched detectors: Double beta decay and perspectives in astrophysical gamma-ray spectroscopy and in dark matter detection.

[H.V. Klapdor- Kleingrothaus](#), (Heidelberg, Max Planck Inst.) . 1991.

Preprint - Klapdor-Kleingrothaus, H.V. (rec.Nov.91) 13 p.B.

304) Concluding remarks.

[H.V. Klapdor- Kleingrothaus](#), (Heidelberg, Max Planck Inst.) . 1991. 7pp.

Published in [J.Phys.G17:S537-S543,1991](#).

305) New limits on neutrino mass from double beta decay. (In German).

[H.V. Klapdor- Kleingrothaus](#), (Heidelberg, Max Planck Inst.) . 1991.

Spectrum Wiss. (1991) No. 10 20-24, In \*Klapdor-Kleingrothaus, H.V. (ed.): Sixty years of double beta decay\* 1252-1254.

306) Nuclear matrix elements for double positron emission.

A. Staudt, [H.V. Klapdor- Kleingrothaus](#), (Heidelberg, Max Planck Inst.) , K. Muto, (Tokyo Inst. Tech.) . 1991.

Published in [Phys.Lett.B268:312-316,1991](#).

307) A Comparative study of double beta decay by shell model and quasiparticle RPA.

K. Muto, E. Bender, (Tokyo Inst. Tech.) , [H.V. Klapdor- Kleingrothaus](#), (Heidelberg, Max Planck Inst.) . 1991.

Published in [Z.Phys.A339:435-444,1991](#).

**308) Two neutrino double beta decay with operator expansion method.**

X.R. Wu, A. Staudt, H.V. Klapdor- Kleingrothaus, (Heidelberg, Max Planck Inst.) , Cheng- Rui Ching, Tso- Hsiu Ho, (CCAST World Lab, Beijing & Beijing, Inst. Theor. Phys.) . 1991.

Published in **Phys.Lett.B272:169-172,1991**.

**309) New generation calculations of beta decay far from stability and astrophysics.**

H.V. Klapdor- Kleingrothaus, (Kyoto U.) . 1991.

In \*Tokyo 1991, Proceedings, Unstable nuclei in astrophysics\* 171-186.

**310) Status of the Heidelberg - Moscow beta beta experiment using enriched Ge-76.**

A. Piepke *et al.* 1991.

Prepared for 11th Moriond Workshop: Tests of Fundamental Laws in Physics, Les Arcs, France, 26 Jan - 2 Feb 1991.

In \*Les Arcs 1991, Massive neutrinos: Test of fundamental symmetries\* 91-98.

**311) A new effort to determine the neutrino mass.**

H.V. Klapdor-Kleingrothaus, (Heidelberg, Max Planck Inst.) . 1991.

Published in **Phys.Bl.47:206-207,1991**.

**312) Calculation of beta-delayed fission of Tl-180 and application of the quasiparticle random-phase approximation to the prediction of beta+-decay half-lives of neutron-deficient isotopes.**

A. Staudt, M. Hirsch, K. Muto, H.V. Klapdor-Kleingrothaus, (Heidelberg, Max Planck Inst.) . Sep 24, 1990. 3pp.

Published in **Phys.Rev.Lett.65:1543-1546,1990**.

**313) beta beta decay of Ge-76 with renormalized effective interaction derived from Paris, Bonn and Reid potentials.**

A. Staudt, T.T.S. Kuo, H.V. Klapdor- Kleingrothaus, (Heidelberg, Max Planck Inst.) . 1990.

Published in **Phys.Lett.B242:17-23,1990**.

**314) Calculation of two neutrino and zero neutrino double beta decay rates.**

A. Staudt, K. Muto, H.V. Klapdor- Kleingrothaus, (Heidelberg, Max Planck Inst.) . 1990.

Published in **Europhys.Lett.13:31-36,1990**.

**315) Rare decays of mercury.**

I.N. Vishnevsky *et al.* 1990.

In \*Bratislava 1990, Proceedings, Rare nuclear processes\* 23-35.

**316) Double beta decay, neutrino mass and nuclear structure.**

H.V. Klapdor-Kleingrothaus, (Heidelberg, Max Planck Inst.) . Jun 1989.

Prepared for 23rd Yamada Conference: Nuclear Weak Processes and Nuclear Structure, Osaka, Japan, 12-15 Jun 1989.

Published in \*Osaka 1989, Nuclear weak processes and nuclear structure\* 297-307

**317) Time scale of short time deviations from exponential decay.**

K. Grotz, H.V. Klapdor-Kleingrothaus, (Heidelberg, Max Planck Inst.) . 1984.

Published in **Phys.Rev.C30:2098-3000,1984**.

