

October 11, 2016

GERDA

the GERmanium Detector Array



List of PhD, Diploma and Master theses

1. *Liquid argon as active shield and coolant for bare germanium detectors – A novel background suppression method for the GERDA $0\nu\beta\beta$ experiment,*
Peter Peiffer,
PhD thesis, Max Planck Institut für Kernphysik, Heidelberg, July 2007.
2. *Low-Level Gammaspektroskopie im Rahmen des GERDA-Experiments zur Suche nach dem neutrinolesen Doppel-Betazerfall in ^{76}Ge ,*
Werner Maneschg,
Diploma thesis, U. Heidelberg, July 2007.
3. *Prompte Gamma Aktivierungsanalyse an ^{76}Ge ,*
Georg Meierhofer,
Diploma thesis, Physikalisches Institut, Universität Tübingen, December 2007.
4. *Pulse shape discrimination studies in a liquid Argon scintillation detector,*
Tina Pollmann,
Diploma thesis, U. Heidelberg, July 2007.
5. *Techniques to distinguish between electron and photon induced events using segmented germanium detectors,*
Kevin Kröninger,
PhD thesis, TU München, Max Planck Institut für Physik, München, July 2007.
6. *Interlockkontrolle und Schleusensteuerung des GERDA-Experiments,*
M. Kästle,
Diploma thesis, FH Augsburg, March 2008.
7. *Search for Double Beta Decay with HPGe Detectors at the Gran Sasso Underground Laboratory,*
Oleg Chkvorets,
PhD thesis, Max Planck Institut für Kernphysik, Heidelberg, July 2008.
8. *Automatisierung der Messprozesse des GALATEA Teststandes ,*
A. Glück, Master's thesis, FH Augsburg, March 2009.
9. *Characterization of a Broad Energy Germanium detector through advanced pulse shape analysis techniques for the GERDA double-beta decay experiment ,*
Matteo Agostini, Master's thesis, U. Padova, 2009.
10. *Design, Simulation und Aufbau des Gerda-Myonvetos,*
Markus Knapp,
PhD thesis, Kepler Center für Astro und Teilchen Physik, U. Tübingen, October 2009.

11. *Development of Segmented Germanium Detectors for Neutrinoless Double Beta Decay Experiments,*
Jing Liu,
PhD thesis, TU München, Max Planck Institut für Physik, München, June 2009.
12. *Germanium detector studies in the framework of the GERDA experiment,*
Dusan Budjas,
PhD thesis, Max Planck Institut für Kernphysik, Heidelberg, May 2009.
13. *Performance and stability tests of bare high purity germanium detectors in liquid argon for the GERDA experiment,*
Marik Barnabè Heider,
PhD thesis, Max Planck Institut für Kernphysik, Heidelberg, May 2009.
14. *Experimental characterization of a Broad Energy Ge detector for the GERDA experiment ,*
Giovanna Pivato, Master's thesis, U. Padova, 2010.
15. *Gammaspektroskopie mit Germaniumdetektoren,*
Alexander Hegai,
Diploma thesis, Physikalisches Institut, Universität Tübingen, 2010.
16. *A Liquid-Argon anti-Compton Veto with Silicon Photomultipliers,*
Hossein Aghai-Khozani,
Diploma thesis, Max-Planck Institut für Physik, Technische Universität München, 2010.
17. *Mirror pulses and position reconstruction in segmented HPGe detectors,*
Sabine Hemmer,
Diploma thesis, Max-Planck Institut für Physik, Technische Universität München, 2010.
18. *Neutron capture on ^{76}Ge ,*
Georg Meierhofer,
PhD thesis, Kepler Center für Astro und Teilchen Physik, U. Tübingen, December 2010.
19. *Pulse Shapes and Surface Effects in Segmented Germanium,*
Daniel Lenz,
PhD thesis, TU München, Max Planck Institut für Physik, München, March 2010.
20. *Segmented High Purity Germanium Detectors: Systematic Effects,*
Annika Vauth,
Diploma thesis, Max-Planck Institut für Physik, Technische Universität München, 2010.
21. *Untersuchungen zur Totschicht von BEGe-Detektoren im Rahmen des GERDA Experiments ,*
Sebastian Georgi, Bachelor's thesis, U. Heidelberg, 2010.
22. *Analysis of Double Beta Decays in Germanium, Palladium and Argon,*
Björn Lehnert,
Diploma thesis, TU Dresden, 2011.
23. *Characterization of Junction Gate Field Effect Transistors at Room temperature and 77 K ,*
Jeschua Geist, Bachelor's thesis, U. Heidelberg, 2011.
24. *LArGe – A liquid argon scintillation veto for GERDA,*
Mark Heisel,
PhD thesis, U. Heidelberg, April 2011.
25. *Measurement of two neutrino double beta decay with the LArGe facility at Gran Sasso ,*
Benato Giovanni, Master's thesis, U. Padova, 2011.
26. *Noise measurements of the GERDA preamplifier ,*
Lisa Gamer, Bachelor's thesis, U. Heidelberg, 2011.
27. *Analysis of the first data of the GERDA experiment at LNGS,*
Paolo Zavarise,
PhD thesis, U.L'Aquila; LNGS, 2012.
28. *Analysis of the Gerda Muon Veto – First Light,*

- Florian Ritter,
PhD thesis, U. Tübingen, 2012.
29. *Calibration of Phase I of the GERDA Double Beta Decay Experiment*,
Francis Froborg,
PhD thesis, U. Zurich, 2012.
30. *Characterization of enriched and depleted BEGe detectors for the GERDA experiment*,
Katharina von Sturm,
Diploma thesis, U. Tübingen, 2012.
31. *A design study to determine the ideal setup for an in-situ measurement of the attenuation length of liquid argon in GERDA*,
Björn Scholz,
Diploma thesis, TU Dresden, 2012.
32. *Investigation of cosmic ray shielding properties of different materials at shallow depths*,
Michel Aaron,
Diploma thesis, TUM, MPI-P, 2012.
33. *Investigation of Pulse Shape Performance of the First GERDA Phase II Detectors*,
Victoria Wagner,
Diploma thesis, U. Heidelberg; MPI K, 2012.
34. *Methods to improve and understand the sensitivity of high purity germanium detectors for searches of rare events*,
Oleksander Volynets,
PhD thesis, TUM; MPI-P, 2012.
35. *Misura del Decadimento Beta Doppio con emissione di neutrini con l'esperimento GERDA al Gran Sasso*,
Luca Peraro, Master's thesis, U. Padova, 2012.
36. *Studies of high-purity Ge detector signals*,
Andrea Lazzaro, Master's thesis, U. Milano / TUM, 2012.
37. *Studies of Neutron Flux Suppression from a γ -ray Source and the GERDA Calibration System*,
Michal Tarka,
PhD thesis, U Zurich, 2012.
38. *Analisi delle prestazioni di rivelatori Broad Energy Germanium (BEGe) nei tests della fase II dell'esperimento GERDA ai LNGS (Performances of BEGe detectors for the GERDA Phase II project)*,
Valerio D'Andrea, Master's thesis, U. L'Aquila; LNGS, 2013.
39. *Neutronenphysikalische Studien an Germanium für Experimente zum neutrinolosen Doppelbetaerfall von ^{76}Ge* ,
Alexander Domula,
PhD thesis, TU Dresden, 2013.
40. *Signal and background studies for the search of neutrinoless double beta decay in GERDA*,
Matteo Agostini,
PhD thesis, Technische Universität München, 2013.
41. *Development of a setup for an in-situ measurement of the light attenuation of liquid argon for the GERDA experiment*,
Birgit Schneider,
Diploma thesis, TU Dresden, 2014.
42. *Muonic Background in the GERDA $0\nu\beta\beta$ Experiment*,
Kai Freund,
PhD thesis, U. Tübingen, 2014.
43. *Results on Neutrinoless Double Beta Decay Search in GERDA: Background Modeling and Limit Setting*,
Neslihan Becerici-Schmidt,
PhD thesis, MPI Physics, Munich and TU Munich, 2014.

44. *Search for the neutrinoless double β -decay in GERDA Phase I using a Pulse Shape Discrimination technique,*
Andrea Kirsch,
PhD thesis, MPI-K and U. Heidelberg, 2014.
45. *Study of Lepton Number Conserving and Non-Conserving Processes Using GERDA Phase I Data,*
Sabine Hemmer,
PhD thesis, U. Padova, 2014.
46. *The TUM liquid argon test stand:Commissioning and characterization of a low background test stand for background suppression studies in the frame of the GERDA ($0\nu\beta\beta$)-experiment ,*
Christoph Wiesinger, Master's thesis, TU Munich, 2014.
47. *Background Reduction Techniques for the GERDA Experiment,*
Manuel Walter,
PhD thesis, U. Zurich, 2015.
48. *Data Reconstruction and Analysis for the GERDA Experiment,*
Giovanni Benato,
PhD thesis, U. Zurich, 2015.
49. *Emanation Measurement System and GERDA Phase II Calibration ,*
Michael Miloradovic, Master's thesis, U Zurich, 2015.
50. *Confined event samples using Compton coincidence measurements for signal and background studies in the GERDA experiment,*
Katharina von Sturm,
PhD thesis, U. Padova, 2016.
51. *The neutrinoless double beta decay experiment GERDA Phase II: A novel ultra-low background contacting technique for germanium detectors and first background data,*
Tobias Bode,
PhD thesis, TU Munich, 2016.
52. *Search for $2\nu\beta\beta$ Excited State Transitions and HPGe Characterization for Surface Events in GERDA Phase II,*
Bjoern Lehnert,
PhD thesis, TU Dresden, 2016.