

Dr. Holger Marten – Deputy project leader GridKa***1962****Scientific career**

University	Diploma in Physics, Christian-Albrechts-University Kiel	1983-1990
Dr. rer. nat.	Christian-Albrechts-University Kiel, Astrophysics	1990-1994
Scientist	Astrophysical Institute Potsdam	1994-1995
Post-Doc	Institute for Neutron Physics and Reactor Technology, FZK	1995-1999
Scientist	Department "High Performance Computing", Institute for Scientific Computing, FZK	1999-2001
Department and project leader	Head of department "Grid Computing Infrastructure and Service" and project leader GridKa, Institute for Scientific Computing, FZK	2002-2008
Current position	Head of department "Distributed Systems and Grid" and deputy project leader GridKa, Steinbuch Centre for Computing, FZK	since 2008

Field of research:

Astrophysics: Code development and numerical simulations for radiation transport, gas dynamics and time-dependent ionization of low density plasmas; dynamical evolution of planetary nebulae; stellar evolution.

Plasma Physics: Code development and numerical simulations for radiation hydrodynamics; shock wave theory; Equation of State of dense plasmas; simulation of material ablation with light ion and laser sources; inertial confinement fusion.

High Performance Computing: Performance analysis, optimization and parallelization of HPC applications.

Grid Computing: Leader of Work Package 2 "Programming Environment" of the EU-Project CrossGrid, IST-2001-32243 (first half of the project); Manager of the Regional Operations Centre of the German-Swiss region of EU-Project EGEE, INFSO-RI-508833; Project Leader of GridKa during phase I and II; member of several boards of the Worldwide LHC Computing Grid Project, WLCG.

Selected publications

- 1) Heiss, A., Marten, H., *The German WLCG Tier-1 centre GridKa - preparing for the LHC startup*. Frühjahrstagung DPG, Fachverband Teilchenphysik, Freiburg, 3.-7.März 2008 Verhandlungen der Deutschen Physikalischen Gesellschaft, R.6, B.43(2008) T 67.1
- 2) Alef, M., Marten, H., *Aufbau eines Grid-Rechenzentrums unter den Aspekten Kompaktheit und Energie- Effizienz*. 24.DV-Treffen der Max-Planck-Gesellschaft, Jena, 6.-8.November 2007, to appear in: Berichte der Gesellschaft für wissenschaftliche Datenverarbeitung Göttingen
- 3) Hermann, S.; Marten, H.; van Wezel, J. *A distributed approach for a regional Grid operation centre*. Internat. Conf. on Computing in High Energy and Nuclear Physics (CHEP 2007), Victoria, CDN, September 2-7, 2007, to appear in: Journal of Physics: Conference Series, IOP Publishing
- 3) Hermann, S., Marten, H., v.Wezel, J., *Operating a Tier1 Centre as Part of a Grid Environment*. 15th Conference on Computing in High Energy and Nuclear Physics (CHEP 2006), Mumbai, IND, February 13-17, 2006, S. Banerjee (Ed.), MacMillan India Ltd., 770-772, 2006
- 4) Albino Nogueira Ramos, L., et al., *LCG 3D Project Status and Production Plans*. 15th Conference on Computing in High Energy and Nuclear Physics (CHEP-2006), Mumbai, IND, February 13-17, 2006, S. Banerjee (Ed.), MacMillan India Ltd., 994-997, 2006
- 5) Marten H., *Grid Computing – Basis of multi-institutional virtual organizations*. in: Disappearing Architecture – from Real to Virtual to Quantum, G. Flachbart, P. Weibel (eds.), Birkhäuser, 42-50, 2005, ISBN 3-7643-7275-3