



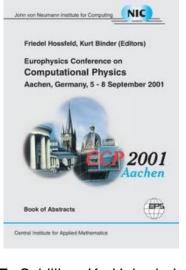
FAREWELL OF DR. NORBERT ATTIG

21 APRIL 2023 | 25TH ANNIVERSARY OF THE NIC | PROF. THOMAS LIPPERT



MY FIRST CONTACTS WITH NORBERT

- A few common visits of LQCD workshops during our PhD times (1987/88)
- First deeper exchange during the conference Physics Computing in Lugano, 1994
- Some joint publications followed in the next few years
 - Running a Code for Lattice Quantum Chromodynamics Efficiently on CRAY T3E Systems; Attig, N.; Güsken, S.; Lacock, P.; Lippert, T.; Schilling, K.; Ueberholz, P.; Viehoff, J. (1998), Proceedings of High Performance Computing and Networking Europe 1998 (HPCN), The Netherlands, 21. 23. April 1998, pp. 183-192
 - Highly Optimized Code for Lattice Quantum Chromodynamics on the CRAY T3E; Attig, N.; Güsken, S.; Lacock, P.; Lippert, T.; Schilling, K.; Ueberholz, P.; Viehoff, J. (1998), Proceedings of the International Conference on Parallel Computing (ParCo'97), Parallel Computing: Fundamental Applications, and New Directions, In: Advances in Parallel Computing, Vol. 12, Editors: E.H. D'Orlander, G.R. Joubert, F.J. Peters, U. Trottenberg, R. Völpel, North Holland, 1998, pp. 557-564
 - Giant Eigenproblems from Lattice Gauge Theory on CRAY T3E Systems; Attig, N.; Lippert, T.; Neff, H.; Negele, J.; Schilling, K. (2001), Comp. Phys. Comm. 142 (2001), pp. 196-200
- Norbert was the Scientific Secretary of the Conference on Computational Physics (CCP 2001);
 Chairmen were Friedel Hoßfeld and Kurt Binder; 400 participants from 42 countries
 - Proceedings of the Europhysics Conference on Computational Physics; Attig, N.; Esser, R.; Kremer, M. (Eds), Comp. Phys. Comm. 147 1-2 (2002), pp. 1-758
- Norbert made me aware of the successor position of Prof. Friedel Hoßfeld, Head of ZAM, in 2002 Lots of discussions followed and my application was finally successful in 2004.



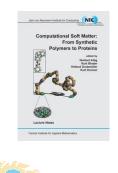


SELECTED HIGHLIGHTS OF NORBERT'S WORK

In 2004 Norbert organized together with Kurt Binder, Helmut Grubmüller and Kurt Kremer the NIC Winter School Computational Soft Matter: From Synthetic Polymers to Proteins

Computational Soft Matter: from Synthetic Polymers to Proteins; Attig, N.; Binder, K.; Grubmüller, H.; Kremer, K. (Hrsg.) (2004),
 NIC Winter School, 29; February - 6 March 2004, Gustav-Stresemann-Institut, Bonn, Germany - Lecture Notes; NIC Series Volume 23, ISBN 3-00-012641-4, 474 Pages

- The NIC initiative Strengthening Computational Science in Europe (SCSE) towards the new EU member states was launched in January 2006
 - The John von Neumann Institute for Computing (NIC): A survey of its supercomputer facilities and its Europe-wide computational science activities; Attig, N. (2006), Nuclear Physics B Proceedings Supplement, 153 (2006), 1, 3 8
- Development and implementation of the Simulation (and Data) Lab concept
 - Simulation Laboratories: An Innovative Community-Oriented Research and Support Structure; Attig, N.; Esser, R.; Gibbon, P. (2008); Proceedings of the Cracow Grid Workshop (CGW'07), 16.-18. Oktober 2007 / eds.: M. Bubak, M. Turala, K. Wiatr. - Krakow, Polen, ACC CYFRONET AGH, ISBN 978-83-915141-9-1, pp. 1 – 9
- In 2007 Norbert became head of the application support division







SELECTED HIGHLIGHTS OF NORBERT'S WORK II

 Major contributions to the setup of the Gauss Centre for Supercomputing (GCS), its governance and the GCS Lenkungsausschuss (since 2007)

- Similar work with respect to JARA-HPC (since 2010)
- Coordination of the Helmholtz Compute and Data Concept (2010-2012)
- In 2012 Norbert became JSC Deputy Head together with Thomas Eickermann
- Supporting the establishment of a regional HPC centre CaSToRC in Nicosia, Cyprus by working in the EU CSA projects LinkSCEEM and LinkSCEEM-2 and the Cyprus national project Cy-Tera during the period 2007-2016; additionally, Norbert was acting as the head of the Research Allocation Committee (2010-2016)
- Involvement in further nationally- and EU-funded projects, among them PetaGCS, SiVeGCS, I3HP, DEISA,
 PRACE, EoCoE, Sano



SELECTED HIGHLIGHTS OF NORBERT'S WORK III

- Shaping the setup of CHANGES, a Chinese, American and German initiative in HPC (2012) and later (2015) the setup of the international consortium Joint Lab on Extreme Scale Computing
- Identifying and negotiating support actions for a huge data analysis at JSC for data received by the Alpha Magnetic Spectrometer on the International Space Station (since 2012)



- Electron and Positron Fluxes in Primary Cosmic Rays Measured with the Alpha Magnetic Spectrometer on the International Space Station, M. Aguilar, et al., incl. N. Attig and Th.Lippert (2014), Phys. Rev. Lett. 113(12), 121102, 10.1103/PhysRevLett.113.121102
- Observation of Complex Time Structures in the Cosmic-Ray Electron and Positron Fluxes with the Alpha Magnetic Spectrometer on the International Space Station;
 M. Aguilar, et al., incl. N. Attig and Th. Lippert, et al.:. Phys. Rev. Lett. 121(5), 051102 (2018), 10.1103/PhysRevLett.121.051102.
- The Alpha Magnetic Spectrometer (AMS) on the International Space Station: Part II Results from the first seven years; M. Aguilar, et al., incl. **N. Attig** and Th.Lippert, Physics Reports **894** (2021), 1-116.
- Properties of Daily Helium Fluxes; M. Aguilar, et al., incl. N. Attig and Th.Lippert, Phys. Rev. Lett. 128(23), 231102 (2022), 10.1103/PhysRevLett.128.231102
- Improving the relationship between DKRZ and JSC; successful acquisition of third-party funding from the Helmholtz association (15 M€) for a Tier-0/1 compute partition on JUWELS for Earth System Modelling (2017)
- Preparing for Exascale: Setup of the FZJ-MPG initiative (2020), contributing to the Exascale proposal (2022)



CONTINUOUS ACTIVITIES

• From 2005 to 2020 Norbert served as the topic speaker for the supercomputer facility in the Helmholtz programs *Scientific Computing* (2005-2009), *Supercomputing* (2010-2014) and *Supercomputing* & *Big Data*

(2015-2020), was responsible for coordinating the program proposal in 2013 and the annual progress reports up to including 2022.

- From 2004 to 2022 Norbert represented the JSC in almost all compute time granting meetings (GCS, NIC, FZJ-VSR, JARA-VGG, ESM, HAICORE)
- Norbert pushed the idea of participating in the ISC and SC exhibitions with a JSC booth since the end of the 90ies and realized it the first couple of years











FAREWELL NORBERT AND ALL THE BEST TO YOU!!



