Workshop on e-Infrastructures

Dr. Patrick Aerts

Dr. P.J.C. Aerts is chair of the e-IRG. He holds a PhD in Relativistic Quantum Chemistry from the University of Groningen. He is director and secretary of the board of the Netherlands National Computing Facilities Foundation (NCF) since the establishment of the foundation in 1990. The Netherlands National Computing Facilities foundation (NCF) is an independent organisation under the umbrella of the Netherlands Organisation for Scientific Research (NWO). NCF is reponsible for the national high-end computing infrastructure and in charge of the Dutch academic supercomputing policy and infrastructure.



Patrick Aerts holds a number of additional functions, such as advisor to the board of 'ICT for Science' of the SURF Foundation, Chairman of the section of computer applications of the Royal Netherlands Chemical Society. Local coordinator for the establishment of Digital Academic Repositories (DARE-project). Theme-coordinator for the NWO-Theme Digitalisation and Informatisation. Dr. P.J.C. Aerts was recently a member of the ad hoc Evaluation Committees of national High Performance Computing Consortia in Norway and Sweden.

Rick Stevens

Professor Stevens is director of the Mathematics and Computer Science Division and director of Argonne's advanced computing initiative targeting the development of petaflop/s computing systems. He is director of The ANL/UC Computation Institute, a multidisciplinary institute aimed at connecting computing to all areas of inquiry at the University and the Laboratory. Recently he has been appointed project director for the National Science Foundation supported TeraGrid project to build the US's most comprehensive open scientific computing infrastructure (linking ANL/UC, NCSA, SDSC and Caltech). He also heads the



Argonne/Chicago <u>Futures Lab</u> a research group he started in 1994 to investigate problems in large-scale scientific visualization and advanced collaboration environments (his group in the Futures Lab has developed the widely deployed Access Grid collaboration system).

Prof. Stevens is interested in the development of innovative tools and techniques that enable computational scientists to solve important large-scale problems effectively on advanced scientific computers. Specifically, his research focuses on three principal areas: advanced collaboration and visualization environments, high-performance computer architectures (including Grids) and computational problems in the life sciences, most recently the computational problems arising in systems biology. In addition to his research work, Prof. Stevens teaches courses on computer architecture, collaboration technology, virtual reality, parallel computing and computational science.

Latif Ladid

Latif Ladid holds an ESCAE (France), and did post-graduate work in business and administration in the UK. He is currently the President of <u>IPv6 Forum</u>, and serves as a Trustee of the <u>Internet Society</u> (ISOC). With support from the IETF IPv6 Working Group and the IPv6 Deployment Initiative, Latif founded the IPv6 Forum in May 1999. Additionally he is Chair of the <u>European IPv6 Task Force</u> and Vice Chair of the <u>North</u> <u>American IPv6 Task Force</u>).



As he researcher he is involved with multiple European Commission Next Generation Technologies IST Projects including 6INIT (www.6init.org), 6WINIT (www.6winit.org), Euro6IX: www.euro6ix.org, Eurov6 (www.eurov6.org), and NGNi, <u>http://www.ngni.org</u>). He is also a project initiator of the first IPv6 Security & Privacy project called Security Expert Initiative (www.seinit.org). He is also a member of a number of other organisations and committees, such as 3GPP2 PCG (www.3gpp2.org), IEC Executive Committee, the United Nations ICT TF Policy WG and the ITU-T Informal Forum Summit.

He has worked in various managerial and marketing positions at Nixdorf Computers in Germany, and Hewlett-Packard in the Middle East, as International Sales Manager at ComputerLand Europe in Luxembourg, and as Managing Director of ComputerLand Switzerland. From 1992 to 1998, he was with the Canadian Internet and internetworking specialist, DEVELCON, where he served as Vice President of Sales and Business Development. In 1998, Latif joined Telebit Communications A/S as Vice President, Sales EMEA (In June 1999, Ericsson acquired a major share in Telebit, creating Ericsson Telebit A/S). He served, from 1996 to 1998, as chairman of Global-ISDN.

Dr. Aad van der Steen

Dr. Aad van der Steen studied mathematics at the Delft University of Technology while providing computational support at the Interuniversity Reactor Institute in Delft. After a short stay as a mathematical modeller at the Environmental Ministry he started working for the Computing Centre of the Utrecht University and as an advisor to NCF for High Performance Computing. He obtained his PhD. from the Computational Physics Department of the Utrecht University on the subject of benchmarking High Performance computers. He currently heads the High Performance Computing Group at Utrecht University in The Netherlands. Since 1990 he is responsible for the benchmarking of the computer systems for the Dutch scientific community via NCF, the computer branch of the Dutch Science foundation <u>NWO</u>.



Aad van der Steen is well known for his "Overview of recent supercomputers", which has been published since 1992 and is currently in its 15th edition. He has a long record in benchmarking of High Performance computers. He is author and editor of the online EuroBen Benchmark.

John Gordon

John Gordon is the Deputy Director of <u>CCLRC</u>'s e-Science Centre. He is currently the Deputy Project Leader of <u>GridPP</u>, the UK's largest Grid project which is building a production grid for particle physics in the UK and leads the UK part of the Operations and Support SA1 in <u>EGEE</u>, the largest FP6 Grid Infastructure project.

Until late 2004 John was the Director of the UK's Grid Support Centre which provided support for all the UK's e-science projects. Other current work includes The Large Hadron Collider Computing Grid when

current work includes The Large Hadron Collider Computing Grid where he represents the UK on the Grid deployment Board and other panels.

The CCLRC e-Science Centre has a mission to gridify the large-scale facilities at CCLRC, including ISIS, a high power Neutron scattering source, SRS, the existing synchrotron radiation source and its successor Diamond which opens in 2007, roughly the same time as the LHC. eSC is also involved in e-science projects from most of the UK Research Councils, the UK's Digital Curation Centre, and leads the work on building and running the UK's National Grid Service.

Prof. dr. Kees Stuurman

Kees Stuurman (1956) is professor of information technology regulation at the Tilburg Institute for Law, Technology and Society (TILT) since 2001. Next to his academic work he is partner of Van Doorne attorneys and civil law notaries in Amsterdam, and practice group leader of Van Doorne's IP/IT group.

He holds masters degrees in physics and in law from the Vrije Universiteit Amsterdam. From 1985 until 2000 he was (senior) research associate at the Computer/Law Institute of the Vrije Universiteit Amsterdam. In 1995 he obtained his doctorate in law based on a study of the legal significance of technical standards in the field of information technology and telecommunications.

His research activities cover a broad range of topics, varying from e-commerce law (contracting issues, electronic signature, consumer protection), computer contracts, legal aspects of certification and standardisation, to liability issues relating to information technology and telecommunications. He participated in a large number of national and international (European) research projects and acted as a reviewer for the European Commission and for the Dutch Science Foundation (NWO).

Currently, the main focus of his academic work lies in the field of regulatory aspects of information technology and other high technologies (e.g. biotechnology and nanotechnology) with a specific focus on self regulation (codes of conducts, standards, certification etc.).

His law practice focuses on legal aspects of IT and telecoms transactions, including contracting issues, public procurement, outsourcing and electronic commerce. He is amongst other things a member of the board of the Netherlands Association for Information Technology and Law, member of the legal expert committee of ECP.NL





(ElectronicCommerce Platform Nederland), and member of the editorial board of The Computer Law and Security Report.

Prof. dr. Manuel Delfino

Manuel Delfino is Professor of Physics at the Universitat Autonoma de Barcelona, Spain (UAB) and Adjoint Researcher at the Institut de Fysica d'Altes Energies (IFAE) in Barcelona. He is currently the Director of the Port d'Informacio Cientifica (Scientific Information Port) in Barcelona and the Coordinating Principal Investigator of the LHC Computing Grid Project in Spain and of the Southwest Europe Federation in



the EU Enabling Grid for E-sciencE project. He was on leave during 1999-2002 serving as Leader of the Information Technology Division of CERN, the European Organization for Nuclear Research based in Geneva, Switzerland.

Prof. Delfino holds a B.S. in Applied Mathematics, Engineering and Physics, an M.S. in Physics and a Ph.D. in Physics with a minor in Computer Science, all from the University of Wisconsin in Madison, USA.

Prof. Delfino's research results in particle physics include the first direct evidence for weak neutral currents between electrons and positrons using the MAC detector at the Stanford Linear Accelerator Center and precision measurements of Z boson decays to leptons using the ALEPH detector at CERN. On the scientific instrument side, he participated in the development of the first large scale gas calorimeters in the 1980s and more recently in development of the ATLAS Scintillating Tile Calorimeter.

Prof. Delfino has devoted a large portion of his career working on integrating distributed computation into scientific activities. He lead the ALEPH FALCON quasi-online data processing facility based on a farm of loosely coupled commercial processors and he was the spokesperson of the CERN RD-47 project which served as proof of concept for building large-scale processor farms using inexpensive Personal Computers. While at CERN, he helped to launch the EU DataGrid and the LHC Computing Grid projects.

Prof. Delfino proposed in 2001 the creation of the Port d'Informacio Cientifica (PIC), an innovative center focused on providing Grid-enabled resources for data-intensive scientific computing. PIC was created in October 2002 and is currently funded through a collaboration agreement between CIEMAT (Ministry of Education and Science, Spain), DURSI (Department of Universities and Research, Catalonia), UAB and IFAE.

Dany Vandromme

Dany Vandromme is a member of the e-IRG on behalf of France. He has been director of GIP RENATER since July 1st, 1998. Vandromme was appointed professor in 1988 at the <u>National Institute for Applied Sciences at Rouen</u>. As a researcher, he is responsible of the Computational Fluid Dynamics Laboratory (LMFN), a component of <u>CORIA</u>,



UMR 6614 of <u>CNRS</u> (National Center for Scientific Research). Research domain is the numerical modeling applied to supersonic and reactive flows with a special interest for turbulence physics.

Responsible for the regional network SYRHANO (Upper Normandy region) since its beginning in 1993, and chairman of the networking and computing Centre of Upper Normandy (<u>CRIHAN</u>) since its création (1992), Dany Vandromme has been a user of ARPANET in the early 80's, and later on, of INTERNET, as a post-doc and associate research fellow at NASA Ames Research Center from 1980 to 1990.

He was in charge of the networking and computing activities at the <u>Engineering Sciences</u> <u>Department</u> of <u>CNRS</u> from 1993 to 1998. As such, he was also supervising the CNRS laboratories depending from the section #10 of the "Comité National de la Recherche Scientifique".

As director of <u>RENATER</u>, Dany Vandromme works on evolutions of the public Internet in France, on technical aspects as well as on economy models, suited to the specific requirements of the research and education community. Dany Vandromme represents RENATER in the European NREN consortium in charge of GEANT (<u>www.geant.net</u>). Since January 2001, he served as member of the DANTE (<u>www.dante.org.uk</u>) Board of Director. Since January 2003, he is the Chairman of the DANTE Board.

He participates to the works of <u>ICANN</u>, through the non-commercial constituency (<u>NCDNHC</u>) of the Domain Name Supporting Organisation (<u>DNSO</u>).

He is one of the two French representatives in the European Strategy Forum for Research infrastructures (ESFRI).

Dany Vandromme awarded as "Chevalier de l'Ordre National du Mérite" on January 31st, 2002.

Hans Döbbeling

Hans Döbbeling joined DANTE as General Manager in August 2004. He studied physics, and obtained his PhD from the University of Heidelberg in 1981. He worked for twelve years as an experimental physicist in medium-energy nuclear physics at MPI fur Kernphysik Heidelberg, at CERN in Geneva, at KEK in Tsukuba, and at PSI in Villigen.



In the early nineties, he became an IT services manager. He was head

of the Analysis Software Development group at GSI in Darmstadt, and later in charge of the IT services of the European Molecular Biology Laboratory (EMBL) in Heidelberg.

Victor Alessandrini

Dr. Victor Alessandrini has been director of IDRIS since 1993. He holds a Ph D in Theoretical Physics. He was visiting scientist at Laurence Berkeley Laboratory, USA and CERN Theory Division in the late 60's and early 70's. He is an Associate Member at the International Center for Theoretical Physics (1972-1976). In 1976 he was appointed Professor of



Theoretical Physics at Paris XI (Orsay). He is scientific manager of EUROGRID (for the CNRS partner).

Competences in Physics :

- Quantum Field Theory,
- Statistical Mechanics,
- Algorithms in Computational Physics.

Competences in Computer Science :

- Computer architectures,
- Performance engineering, object oriented software development (C++, Java),
- Distributed Objects (CORBA) and distributed applications,
- Shared memory multithreading programming,
- Training in C++ and Threads.

Ir. Kees Neggers

Kees Neggers is Managing Director of SURFnet by, and has been so since its establishment in 1988. SURFnet's mission is to develop and operate an advanced networking infrastructure for the research and higher education community in the Netherlands.

He was involved as an initiator and Board member in several International network related organizations such as RARE, TERENA, Ebone, Internet Society and RIPE NCC. Currently he is active in the set up of GLIF, the Global Lambda Integrated Facility. Present positions held in Internetrelated international activities include:

- Chairman of the RIPE NCC Executive Board
- European Co-Chair of the CCIRN
- Chairperson of the Global Lambda Integrated Facility (GLIF)
- Member of the Board of the IEEAF

Gigi Karmous-Edwards

Gigi Karmous-Edwards (gigi@mcnc.org) is a Principal Scientist at MCNC Grid Computing and Network Services (GCNS) where her research focus is on novel optical control plane technologies and their role in Grid Computing. Chair of 'Control Plane and Grid Integration' working group of Global Lambda Infrastructure Facilities (GLIF) organization. She is currently the chair of GridNets 2005, workshop on Grid related networking research (part of BroadNets). She organized and chaired two International workshops for 'Optical



Control Plane for the Grid Community,' which continues to meet and make progress in the area of optical control plane research. In her role, she initiates and leads collaborative research activities, which focus on advance networking technologies for Grid computing, and has published several papers in that area. She recently was appointed Adjunct



Professor of Computer Science at North Carolina State University, where she plans on teaching advanced classes on Network Management and Control Planes. She has been an invited guest speaker at several international conferences. She has spent the last fourteen years of her nineteen-year academic and industry R&D career in all disciplines of networking Control Planes and Network Management, including strong activity in standards work, system architecture for data communication systems, and software design for both embedded systems and management applications. She received her B.S. in Chemical Engineering, and her M.S. in Electrical Engineering, from NCSU. She is a member of IEEE society.

Anwar Osseyran

Anwar Osseyran was appointed Managing Director of SARA, the Dutch National Supercomputing Center, in 2001. Prior to that he held various senior management assignments in High-Tech companies. Anwar clearly has a strong industry background, which probably explains his keen interest in trying to understand the business value in HPC as opposed to compiling compute power... He's always looking for the ROI concept for within his projects.

His tenure at SARA has been marked by a focus on the benefits that the Academic and Research community can obtain from emerging technologies (Grid, Linux, Virtual Reality), a focus on less conventional, but fast growing, application areas (Bioinformatics) and on enhancing the networking infrastructure to allow collaboration and a broader and more effective use of the Supercomputing resources. SARA is now a key hub in the Northern European Grid (NEG) and in the European project called DEISA (Distributed European Infrastructure for Supercomputing Applications).

Frank Harris

Frank Harris obtained his D.Phil. at Oxford in 1970 and continued at Oxford in research in computing for particle physics, and also applied image processing and pattern recognition techniques in other application areas such as medicine and digital cartography. He was chairman of the inter-disciplinary Sub-Faculty of Computing at Oxford 1979-1980. He had major project responsibilities in the LEP/DELPHI experiment from 1986-1996, and following that in the LHC/LHCb experiment, including being the coordinator of grid activities. He was leader of the HEP



workpackage in Datagrid 2002-4, and coordinated the HEP activity at the beginning of the EGEE project. He is currently based at CERN, and is deputy coordinator of the overall applications activity in EGEE, taking a special interest in the successful deployment and operation of all applications. He has been a principal author of many papers dating from 1970, and been active in graduate student supervision both at Oxford and CERN.



Torsten Antoni

Dr. Torsten Antoni attended University Karlsruhe, Germany. He studied physics specializing in astroparticle physics and graduating with a diploma thesis on experimental cosmic ray physics. After his graduation he did his PhD with a thesis on muons in cosmic ray air showers at the University Heidelberg, Germany, earning his degree in 2003.

Since 2004 he is working at Forschungszentrum Karlsruhe (FZK), Germany in the field of user support in the grid environment in the framework of the LCG and EGEE projects. He is Head of the Global Grid User Support (GGUS) group at FZK and member of two EGEE user support working groups (ESC, UIG).



Prof. dr. Harvey Butcher

Harvey Butcher is Executive Director of ASTRON. He studied at the California Institute of Technology, receiving a B.Sc. in Astrophysics (Honors) in 1969. In addition to his studies he worked on the first survey of the sky at infrared wavelengths (the Two Micron Sky Survey project), both as an observer and in the development and use of infrared instrumentation. From 1970 to 1974 he held the position of research scholar at the Mt Stromlo and Siding Spring Observatory, receiving his PhD from the Australian National University in 1974. His dissertation research involved the construction of one of the first operational high resolution



echelle spectrographs in astronomy. As Bart Bok Fellow at the Steward Observatory of the University of Arizona from 1974 to 1976 he worked on the development of a Cassegrain echelle spectrograph for the 90-inch telescope on Kitt Peak. From 1975 he worked with early CCD detectors, and during his tenure from 1976 to 1983 as Astronomer at the Kitt Peak National Observatory, Tucson, he worked to develop general purpose CCD systems for use both at Kitt Peak and at Cerro Tololo Inter-American Observatory in Chile. In 1983 he became Professor of Observational Astronomy at the University of Groningen and Director of the Kapteyn Observatory, Roden. In 1991 he was became Executive Director of ASTRON. He is currently working on the Lofar and Square Kilometer radio telescope (SKA).

Prof. Berend Smit

Berend Smit (1962) obtained his PhD Chemistry in 1990 at Utrecht University. He is director of <u>CECAM</u> in Lyon since 2004. After starting his career at Shell Research in Amsterdam, he became a



professor in 1997 at the University of Amsterdam. In 1998 he received the Gold medal of the Royal Dutch Chemical Society. He is Editor of the Journal of Computational Physics since 1999 and since 2002 has also been Editor of PCCP. He published more than 170 papers which have received a total of over 5500 citations

Berend Smit co-authored with Daan Frenkel the book *Understanding Molecular Simulations* (Academic Press, 2nd edit., 2002). Together with the first edition this book has been cited over 1500 times and is used as the text book on molecular simulations in many universities. A quotation of a review "... this book brilliantly lays down the scientific foundations of the simulational approach..." (Physics World, 1997). In 2003 a Chinese translation appeared. On the basis of this book the authors have organized the Amsterdam Molecular Simulation School which has attracted over last 5 years 300 (young) scientists from all over the world.

Lajos Balint

Dr. Lajos Balint (Hungarnet Executive President, NIIFI Director of International Relations) has graduated and received his "doctor technicus" and Ph.D. degrees from the Technical University of Budapest, in 1969, 1976, and 1997, respectively. He is Executive President of Hungarnet, and Director of International Relations at the National Information Infrastructure Development Office (NIIFI) in Hungary. Earlier he has been affiliated at different research and development organisations in information technology, telecommunications, communication networks,



human-computer interaction, and computer-aided design. He has been working on more than 40 grants/projects during the last 35 years. He is a part time Honorary Professor at the Technical University of Budapest. He has presented about 160 publications between 1969 and 2005. He has been a member/representative/officer at a number of national and international professional organisations, including TERENA, DANTE, GEANT, ENPG, ISOC, etc.