OSG Executive Director

Lothar A T Bauerdick/Fermilab

Summary of CV

- **Education**
  - Ph.D. in Physics U.Mainz, Germany 1990
- **Positions**
  - Scientist II at Fermilab since 2000
  - Research Scientist at DESY, Germany 1992-2000
  - Fellow at CERN, Switzerland 1991-1992
- **Current Assignments**
  - Director of the CMS Center at Fermilab since 2006
  - Head of the CMS Department in CD since 2009
  - Software and Computing Manager for U.S. CMS since 2000
  - Co-Lead of the CMS Monitoring Task Force since 2011
  - Member of the Open Science Grid Executive Team since 2011
- **Important Previous Assignments**
  - Member of the Council of the OSG Consortium since 2005
  - Coordinator of the CMS Data Operations Task 2007-2009
  - CMS Computing Coordinator 2005-2006
  - Coordinator of the Data Management Task of CMS 2004-2005
  - Coordinator of the Silicon MVD Project for ZEUS 1999-2000
  - Convener of the Structure Functions Physics Group ZEUS 1995-1998
  - Coordinator of ZEUS Physics Analysis S&C Environment 1993-1995

Opening Statement

- I am honored to be nominated as OSG Executive Director
  - for the start of an exciting 2nd round of the OSG
- I view this as an exciting and demanding assignment, that I pledge to put my fullest attention on
- I have been nominated by the current Executive Team to become their new leader
  - and will continue with the current team
  - want to continue to work with Ruth in the council

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Scientific and Technical Experience

- Senior Scientist at Fermilab, Research interests in physics beyond the Standard Model
  - working with a group of scientist, postdocs and students at Fermilab, UC San Diego and UC Santa Barbara, last year published ~6 or 7 CMS papers

- Strong technical background in software and computing, operations and facilities with many years of experience
  - I am involved in scientific computing since at least 1987, working at CERN and DESY, and for the last 10 years at Fermilab

- As U.S. CMS Software and Computing Manager I have built and am responsible for one of the largest software and computing systems in HEP
  - Yearly budget of currently ~$17M, spent $150M since its start
  - I am leading one of the most successful S&C projects in HEP
    - as measured by the success of CMS and USCMS computing with start of LHC

- Also strong background in detector building
  - I built the forward disks of the ZEUS Silicon Strip Microvertex Detector, and became co-leader of the whole ZEUS MVD project at DESY

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Leadership Experience

- As Fermilab CMS Center Director over the past 5 years
  I have worked closely with Fermilab senior management
- Line management experience
  - Computing Division Department head ~ 20 scientists, computing processionals, visitors
    - Fermilab CMS Center ~15 Research Associated, 2 WF
      - previously at DESY group leader of ZEUS experiment ~ 65 scientists
- Project management and technical leadership experience
  - U.S. CMS Software and Computing Manager ~70 individuals
    - mostly computing professionals, physicists on technical assignments
- Leading people to collaborate towards common goals
  - sometimes solving tricky personnel, personality, political issues
  - developing talent, helping people find a good place in the organization

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Managerial and Administrative Experience

- As CMS Center Head and USCMS S&C Manager, budget planning and tracking, and preparing the yearly budget presentation, combining relevant information across many institutions are important parts of my job
- I have also been involved in numerous Fermilab and U.S. CMS reviews, including regular presentations to the Fermilab Physics Advisory Committee, the yearly DOE/NSF review of the U.S. LHC Operations Program, the DOE Institutional Review of the Fermilab program etc.
- Through my years of interacting with funding agencies in particular during building up and delivering the USCMS S&C project, I established rather good and reasonably trustful relationships with funding agency managers
- I have been serving as the CMS Computing Coordinator in 2005 to 2006. During this time we defined the CMS Computing Model and wrote the Computing Technical Proposal. I have been continuing to help in all kinds of functions mostly in CMS computing and offline

Vision for the Open Science Grid

- I am one of the founding fathers, and went back to the OSG White Paper we wrote to NSF/DOE in July/August 2003, the edits of which are still on my computer:
  - “We propose that the DOE and the NSF endorse a roadmap for the U.S. to build a national grid infrastructure for science: the Open Science Grid.”
- walking through the vineyards around CERN Ruth and I came up with the name OPEN SCIENCE GRID
  - "inventing" the idea of making the LHC computing Grid that we started to build back then an opportunity for other sciences and distributed scientific computing in general
- “We propose an aggressive program of work to federate ... the currently disjoint grid resources at labs and universities into a single scalable, engineered, and managed grid.”
- “Starting with the U.S. LHC grid resources ... the Open Science Grid will provide a set of services that can be enriched as new science areas choose to join and federate their resources. ... Combined computing resources at several DOE labs and at dozens of universities will effectively become a single national computing infrastructure for science, the Open Science Grid”
- “...The Open Science Grid will provide opportunities for educators and students to participate in building and exploiting this grid infrastructure...”
  - building the huge computing system for the LHC, and building onto them, make that into an opportunity for "open science" collaborating with other science community

My Involvement With OSG

- It is to the credit of Ruth, Miron and many others to make this vision come to fruition, while I worked on the side of CMS and USCMS computing making the LHC funding agencies buy into our strategy that was built around OSG
  - the need to build a consortium of sites and VOs to address the issues related to the distributed nature of LHC computing
  - and convince them in particular of the value of LHC collaborating with and contributing to other science domains, including computer science and others
- in 2005-2006 I was the CMS experiment Computing Coordinator, developing and defining the CMS computing model
  - again, with the principles of the OSG in mind, and by then “trained” about the ideas of DHTC through our close collaboration with computer scientists in OSG, which had a profound impact on the nature of LHC computing
- came back into the “inner circles” of OSG about 6 months ago as associate executive director
- participated in ET business, including preparing for this round of funding
  - but still a lot to learn

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Main OSG Mission: Support Science and Scientists

- Broaden the OSG science horizon while continuing to deliver superbly to LHC
  - balance between the needs of the LHC, and the other sciences that are as important to the OSG mission
  - expand into other sciences, make OSG relevant for new communities
- Our approach of broadness and openness informs us about the best technical and organizational solutions, feeding back to the current stakeholders
  - example: campus grids idea applicable to the LHC Tier-3 centers
  - work through the campuses, improve usability and lower problems of use and adoption, be a credible part of the US CI/computational infrastructure; enable the next generation
- Opportunities: work with XSede as a partner providing another option to a large number of sciences
  - I believe this will help the sites, VOs, communities in their scientific missions
- Outreach to other organizations, including WLCG, XSede, EGI and other grids etc

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My Vision for being OSG ED

- Leadership requires breadth of experience and a focus on doing what's right for the OSG and the consortium -- and making sure that people follow
  - Engaging and empowering the teams will be key: area coordinators and members of ET
    - continuity with current ET members and Ruth staying involved as council chair
  - Taking care of and extending what we have built
    - More strategic planning involving all parts of the project
- launching of the 2nd round, in particular formulating and building a plan for the broader CI mission that is coming in particular from the NSF side of the house, taking XSede as an opportunity
  - in the white paper: "The measure of success for this program will be .... the ability to run on resources not "owned" by the Application thus making effective use of the Open Science Grid."
  - as measured e.g. by hours spent by VOs, large progress over the past years -> graphs
- make OSG a welcoming, open, collaboration for new entrants, be flexible in how partnerships and interfaces are handled
  - while insisting on excellence in providing computing, support, DHTC expertise etc, to science
- define focus areas to make progress on important goals
  - engage people to address these issues, empowering area leads and team members
- the ED has to ensure that this happens smoothly and successfully, has to react fast and efficiently and in a maximally informed way to new situations
  - mentor and help younger members to take leadership roles, bring in new talent in places where they can contribute, communicate, communicate, communicate
- I want to be available, nominally 30%, using the time freed up by end of CMS Center Head term

...and, finally

- The job of OSG Executive Director meshes very well with my interests and talents, and I would like to serve for at least one term, and if possible through the mid-term review in ~3 yrs
- I do feel that I am a good match for this position, and it is gratifying to have received the strong support from several members of the group, and from the everyone on the Executive Team
- The OSG is a marvel, and probably unprecedented
    - in particular the consortium of sites, VOs, Labs, Universities, different science communities, the close and seamless collaboration between computer scientists and domain scientists
    - this history of collaboration, cross-institutional configuration is an asset that no one else has
- We have built technical, operational, engineering strength within an open intellectual environment, similar to a scientific collaboration, and the science that's produced is our measure of success
    - system managers and operations people working with scientists directly embedded in the science projects in the domain sciences and in computer science
- we have already seen what we can do, and should maintain, strengthen, expand
- I believe in the vision, potential, way of working of OSG for not only LHC but lots of sciences
    - through the LHC I know first hand about the value of collaborating and contributing to other science domains, which is also fun and there are lots of really exciting things ahead of us
        - multi code, biology, campus, clouds, turning XSEDE into OSG, continuing more than expected contributions to WLCG, making waves in DOE etc
- I'm asking for your vote to become the next OSG Executive Director!

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The Management Team

- Executive Team
- Executive Director: LAT Bauerdick
- Resources Manager: Frank Würthwein
- Technical Director: Miron Livny
- Applications Coordinators: Michael Ernst, Frank Würthwein
- Production Coordinator: Dan Fraser
- Project Manager: Chander Seghal
- ex-officio: council chair
- Area Coordinators
- Production: Dan Fraser -> Operations: Rob Quick, Campus: Dan Fraser
- Security: Mine Altunay
- Software: Alain Roy
- Technology: Brian Bockelman
- User Support: Chander Sehgal
- Cross Cutting Activities:
- Assessment: Rob Gardner
- Communications: Miriam Boone
- Documentation: Jim Weichel
- Education: Tim Cartwright
- International Outreach: Jose Caballero

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most important functions of the ED

- ensure quality deliverables to meet the needs of the users on time
- communicate communicate communicate through 360degrees - up, down, side, round
- expand the spheres of influence and impact
- ensure up to date advanced workable technologies
- mentor the area coordinators - my backbone - to lead over the next few years

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