

WORKSHOP ON GRID TECHNOLOGY

October 20, 2003

Welcome Address by Prof. Riazuddin

It is a matter of great honour and privilege for me to welcome you to the Inaugural Session of the Workshop on Grid Technology. I am particularly grateful to Prof. Dr. Luciano Maiani, Director General of CERN who could find time out of his busy schedule and took the trouble of coming all the way to Islamabad to inaugurate the workshop. His presence here shows his keen personal interest in helping a developing country like Pakistan to get its men catapulted into the forefront of the latest technological enterprise.

The National Centre for Physics, being a co-organizer of the workshop, it is appropriate that I should say a few words about it. The NCP started working from January 1999, and was formally inaugurated by Dr. Ishfaq Ahmad, the then Chairman of PAEC, on May 16, 2000 in the presence of Director General of CERN, Prof. L. Maiani and other dignitaries.

The NCP provides at the national level a focal point for Pakistani talent in newly emerging fields of Physics and Technology having links with the world scientific and technological community, thereby helping our scientists to keep pace with the rapid growth of physics and its links with technology.

Like The Abdus Salam International Centre for Theoretical Physics, Trieste, Italy, our mission is to foster, through training and research, the progress of all branches of physics, paying special attention to needs of Pakistan Universities and R&D Organizations where the researchers often find themselves isolated both from their colleagues and major developments in their respective fields. “And it is not just the physical isolation of the individual scientist that we suffer from. There is also the isolation from the norms of international sciences” – the absence of vibrant scientific atmosphere. We seek to mitigate it by

- Creating an international forum for the exchange of scientific information through comprehensive courses, workshops and conferences,
- Establishing linkages for collaboration in research with active international research centres like CERN and ICTP.

In addition, the Centre conduct research in such areas as is not covered by any institute of Physics in Pakistan. One such area being pursued by the centre involves a small number of activities in theoretical and experimental high energy physics through a cooperative agreement with CERN in Geneva, Switzerland. The Centre is contributing into the R&D and production of muon detector which will be used in a detector at the Large Hadron Collider.

Our collaboration with CERN is growing. In fact NCP is the focal point for the CERN Collaboration in Pakistan and is the only collaborating institute with voting right within CERN.

Not long ago the CERN Council approved unanimously the Protocol between PAEC, NCP and CERN which will provide Pakistan a possibility to contribute more towards LHC project and in return PAEC would be able to get contracts worth US \$ 10 millions. But for your personal interest and efforts this would not have been possible and we are most appreciative of it.

It has been agreed that 2.5% of US \$10 millions will be used for supporting the visit of young scientists from Pakistan to CERN. Under this program already 4 Ph.D. students from NCP visited CERN, which is a great contribution in the human resource development in the frontiers of science and technology.

Our collaboration with CERN grew most under your tenure as Director General, GERN. As such it was our wish that you could visit Pakistan before your term as D.G, expires so that in our own humble way we could express our appreciation to you for all the help we received from you. That you could visit us is fulfillment of our wish.

As Professor Abdus Salam has put it: “The 20th century has been a century of great synthesis in science – the syntheses represented by quantum theory, relativity and unification theories in physics, by the Big Bang idea in cosmology, by the genetic code in biology, by ideas of plate tectonics in geology; likewise in technology, the conquest of space, the harnessing of atomic power and the information revolution provided by the invention of transistor 50 years ago”. Grid Computing is the latest phase in the information revolution. Science and

Engineering Collaboration are increasingly international in scope and rely more and more on massive data archives. Data Grids provide a framework for collaboration and data exchange in large scale projects and are a logical follow-up of the World Wide Web invented at CERN. Our objectives in organizing the workshop on Grid Technology are to provide hands on experience to young Pakistani scientists regarding Data Grids, enhancing their skills in Grid related tools, which include Grid Architecture, Grid Standards and GLOBUS Toolkit. It would also gear up the national IT personnel to participate in Grid related projects and software developments. Although, to date, computing grids have not gone outside of the academic and scientific research communities, but the hope is that like World Wide Web they would have wide spread applications.

Lastly I welcome and thank the invited speakers and the participants and wish them pleasant and fruitful stay with us. Our special thanks are to the very distinguished faculty who have taken their precious time out and undertaken the trouble of coming this far to share their valuable knowledge with us. Our thanks go to all those organizations, CERN and COMSATS, which have contributed towards the holding of this Workshop. On my personal behalf, I wish to thank the Organizing Committee Members for their dedication and hard work. Our special thanks are to Dr. Hafeez Hoorani, Mehnaz Hafeez, Mr. Asif and Muhammad Ali.

