

PREFACE

The ninth European Particle Accelerator Conference, EPAC'04, took place at the Lucerne Culture and Congress Centre (KKL) from Monday to Friday, 5 to 9 July 2004 and was attended by over 800 delegates from over 30 different countries on all continents. Held under the auspices of the European Physical Society Accelerator Group (EPS-AG), it was hosted by the Paul Scherrer Institute. As at previous conferences in the series, the attendance of almost sixty young scientists was made possible through the sponsorship of the following European laboratories and institutions: BESSY, CCLRC (ISIS & ASTeC), CEA DSM, CERN, DESY, ELETTRA, ESRF, Forschungszentrum Jülich, Forschungszentrum Karlsruhe, GSI, INFN, MSL, PSI, Synchrotron Soleil, Novartis, Roche, Serono, Syngenta and Swiss International Air Lines. The organizers of EPAC are grateful to all sponsors for their valuable support.

The conference was opened by Leonid Rivkin, PSI, Chairman of the EPS-AG and the EPAC'04 Organizing Committee, and by Hans-Arno Synal, PSI & ETH Zürich, Chairman of the Local Organizing Committee. CERN's Director General, Robert Aymar, opened the conference with a presentation entitled *Worldwide Perspectives in Accelerators and the Rôle of CERN*. Former CERN DG and current Director of the UKAEA Culham Science Centre, Chris Llewellyn Smith, gave an inspiring closing presentation entitled *The Fast Track to Fusion Power*. Close to eighty invited and contributed oral presentations of very high quality were made during the week, including EPAC's usual "Entertainment" presentation which this time was on Cosmic Accelerators, admirably delivered by R. Blandford of KIPAC at Stanford University.

The scientific programme was organized by the EPAC'04 Scientific Programme Committee (SPC) chaired by Christopher Prior, ASTeC CCLRC RAL and Trinity College Oxford. It spanned four and a half days, with parallel sessions on three mornings and poster sessions on four afternoons. There were 50 invited papers (including the special session for industry and on Technology Transfer organized and chaired by Carlo Bocchetta, Sincrotrone Trieste), 27 contributed oral presentations, and close to 900 poster presentations.

An industrial exhibition took place during the first three days of the conference. Thirty-eight companies presented their high technology products and services to the delegates in an excellent atmosphere conducive to discussions. Philipp Dietrich did a really excellent and professional job organizing this exhibition.

The EPS-AG Accelerator Prizes for 2004 were attributed as follows. The prize for a young physicist or engineer was attributed to Vladimir Shiltsev, FNAL, *for many important contributions to accelerator physics, which include theory, beam simulations, hardware development, hardware commissioning and beam studies*. The prize for outstanding work in the accelerator field was awarded to Igor Meshkov, JINR, *for seminal contributions to numerous advances in accelerator science over the past 40 years and in particular for his development and implementation of the techniques which allowed the original brilliant idea of electron cooling to become a hardware reality and an accelerator tool. In addition for his devotion to and promotion of international collaboration in accelerator physics*. The prizes were presented by the Chairman of the 2004 Prizes Selection Committee, Stephen Myers, CERN, and the Chairman of the EPS-AG, Leonid Rivkin. Furthermore, the EPAC and PAC conference series decided to acknowledge the work of the JACoW Collaboration and CERN's John Poole and Christine Petit-Jean-Genaz made a joint presentation of the work of the Collaboration.

The main media for the proceedings of this conference is publication on the JACoW site (www.jacow.org), and the CD-ROM distributed to all participants. For the first time, the EPAC OC has decided not to produce hard copy volumes. The processing of the electronic files of contributions prior to, during and after the conference was achieved by a dynamic team composed of "experts" and volunteers from the Joint Accelerator Conferences Website (JACoW) collaboration. Thanks to the work of this team and the careful preparations and guidance of Jan Chrin, PSI, Christine Petit-Jean-Genaz and John Poole from CERN, a preliminary version of the proceedings was published only 9 working days after the conference. The final version was published at the JACoW site in the early days of September.

The success of EPAC'04 can be attributed to the efforts of the OC, chaired by Leonid Rivkin, the SPC, chaired by Christopher Prior, the LOC: Andreas Adelman, Marlen Bugmann, Jan Chrin, Philipp Dietrich, Martin Heiniger, Leonid Rivkin, Detlef Vermeulen, PSI, Albin Wrulich, PSI and EPF Lausanne, Christine Petit-Jean-Genaz and John Poole, CERN, under the chairmanship of Hans-Arno Synal, ETH Zürich and PSI. Christine's untiring efforts as the EPAC Conference Series Coordinator insure that the quality and scope of this conference series continue to evolve and improve.

Leonid Rivkin, Chairman of the EPAC'04 Organizing Committee