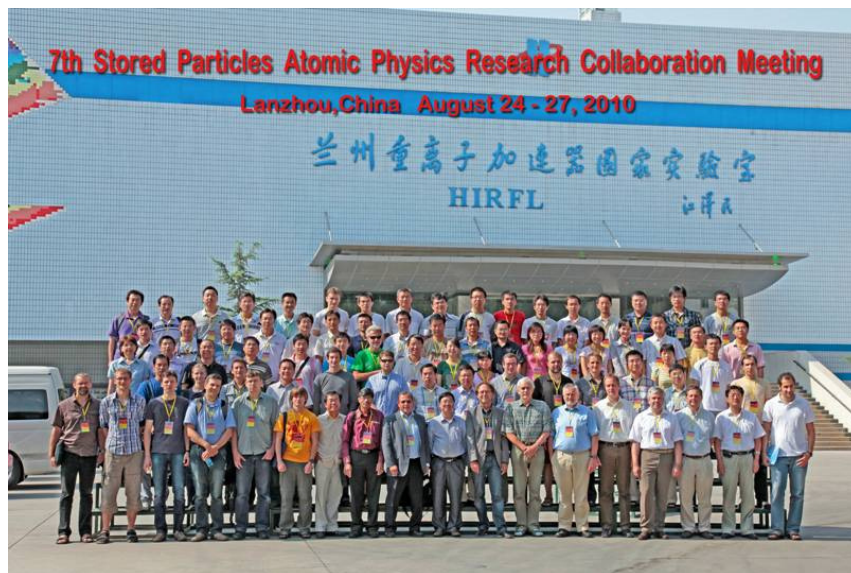


Report on the 7th SPARC Collaboration Symposium, Lanzhou, China



The 7th SPARC (Stored Particles Atomic physics Research) Collaboration Symposium was held at the Institute of Modern Physics in Lanzhou from 24-27 August 2010; the local coordinator was Prof. Xinwen Ma from the Atomic and Molecular Physics Division of this Institute. In total 90 participants from Germany, Sweden, Great Britain, France, Russia, Austria, Greece, Poland, Portugal, India, and China attended the meeting.



The SPARC collaboration has been formed to organize atomic physics experiments at the international FAIR project, Darmstadt, Germany, and aims to join expertise on atomic physics with highly charged ions (HCI) at an international level. The conference program has been arranged by the SPARC board and the representatives of the Atomic and Molecular Division at the Institute of Modern Physics in Lanzhou. The topics include critical and super-critical atomic fields, ion-atom/molecule collisions at non- and relativistic velocities, HCI in traps and rings for spectroscopy, atoms/ions in intense laser fields, ion-matter interactions, and laser-matter interaction, cross-link between atomic physics and nuclear physics, laser spectroscopy, the status of present/future heavy ion and storage ring facilities, and novel instrumentation. In the symposium, review talks with special emphasis on subjects listed above were given along with hot topics and

new ideas recently proposed for the research program of SPARC. A large number of status reports on experiments from the various working groups were presented in talks and a poster session. From the Institute of Modern Physics in Lanzhou impressive progress was reported from the CSR storage rings and its transition to full operation. Also a lot of graduate students from Chinese universities attended the meeting and had a chance to get in close contact with the scientist representing the various research topics of SPARC. Details of the activities and the photo galleries of the meeting can be found on the conference website

<http://210.77.72.2/usr/yzwl1/sparc/sparc2010.htm>

The collaboration meeting addressed technical and financial issues of the SPARC collaboration in particular with respect to the modular start version of the FAIR project and its implications for SPARC. It was emphasized that the experiments already possible in module 1 of the start version (high-energy cave at SIS100, the so called APPA Cave) will allow for challenging experiments such as heavy ion channelling in crystals. However, the heart of the SPARC stays closely connected to the NESR and the FLAIR facility (module 4). It was announced that TDRs for the micro-cluster target and the micro-calorimeter detectors are now being written and prepared for submission.

A very nice offer from Moscow to host the next collaboration meeting in 2011 was presented. This was unanimously accepted by the collaboration. On a board meeting the spokesperson (Reinhold Schuch, Stockholm, Sweden), deputy spokespersons (Fred Currell, Belfast, UK and Marek Pajek, Kielce) and the local contact person (Thomas Stöhlker, GSI, Germany) were re-elected.

The numerous fruitful discussions during the meeting were not ending even during the conference tour visiting the picturesque area along the Yellow River and the local museum.