

LIP International Advisory Committee
Meeting of 31st March 2009 in Lisbon

Present: T. Camporesi, C. W. E. van Eijk, C. W. Fabjan, P. G. Innocenti,
H. Schopper
Apologies: E. R. de Arantes e Oliveira

The LIP International Advisory Committee met in Lisbon on 31st March 2009 to review the 2008 results and discuss the 2009 programme of work.

Prior to the meeting, Committee Members received a detailed report on the 2008 work as well as a description of the programme for 2009.

In a formal session Committee Members met with members of the LIP Directorate, G. Barreira (Lisbon), P. Fonte (Coimbra), R. Marques (Coimbra) and M. Pimenta (Lisbon). J. Maneira secretary of the LIP Scientific Committee also participated in the meeting.

Committee Members also met with the LIP project leaders in a question and answer session on results and perspectives.

Particle physics with accelerators and astroparticle physics were the major efforts in 2008.

- ATLAS and CMS were on schedule for the first circulating beam in the LHC: The components under the responsibility of LIP had been thoroughly tested with cosmic rays and the process of integration was complete. Since then, further testing and improvements are on the way. Preparation for physics is well advanced, both in the simulation and in design of refined triggers. The computing infrastructure required for analysing the data is complete in Coimbra and in Lisbon and is working well. COMPASS at CERN has had a successful period of data taking in 2008 with a hadron beam and expects to continue along the same line in 2009. NA60 at CERN, has completed the data analyses, with LIP in a leading role. LIP Coimbra has progressed in the construction and installation of the RPC-based time-of-flight system for HADES at GSI. This large size project, based on delicate technology, is proceeding according to schedule and is due for completion in 2009.
- The main activities in astroparticle physics has been on the Pierre Auger Observatory. LIP Lisbon staff has participated to data taking and its data analyses. LIP Coimbra has continued its sizeable engagement in the search for WIMPs with ZEPLIN, by participating in data taking and analyses. AMS preparation was revived by the decision to schedule the launch of the detector to the ISS in 2010.

The Committee acknowledges the success and the international recognition of LIP in these fields of research. The committee feels that the investments and contributions of LIP and of the Portuguese teams should translate into more formal recognition (e.g. coordination responsibilities) within the international collaborations.

The GRID computing infrastructure is in operation both in Lisbon and in

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Coimbra with excellent links to other centres in the Iberian peninsula; it is used for LHC computing and made available to other branches of research.

The Committee is impressed by the achievements of LIP in promoting, organising and building a computing infrastructure for science in Portugal and internationally.

Research to apply detector technology to medical physics has continued: The most advanced and visible project in this field, Positron Emission Mammography (PEM), is being prepared for clinical tests.

The developments on PET technology by time-of-flight using resistive plate chambers has received general recognition as a promising approach.

Exploration on new detector techniques has continued. In particular, the Coimbra group has made significant contributions to the field of Micro-Pattern Detectors and has joined the RD51 Collaboration.

In addition to the well established programmes for training Portuguese high school teachers at CERN and for training of young Portuguese graduates, also at CERN, many other outreach initiatives taken by LIP have been successful in 2008.

The review expected in 2007 and then in 2008, at the conclusion of the first five year contract of LIP as Associated Laboratory, has been postponed to 2009: A second five year contract is confirmed, but the conditions of the new contract are still under discussion.

Over the years of the first contract as Associated Laboratory, the Committee has monitored the improvement related to a personnel policy with long term perspectives and strongly supports the continuation of this regime.

Discussions on setting up a consortium grouping LIP with other Institution on a new site have continued and a conclusion is in sight. The Committee encourages LIP to take the lead in these discussions, trying to promote in the Consortium the "LIP model" which has proven successful both in scientific results and in international recognition. The committee urges the LIP management not to compromise on LIP's excellent scientific standards: The Consortium should consist of a limited number of Institutes with similar scientific standing. Moreover, LIP should have the opportunity, within the Consortium, to promote training and teaching as core activity.

Independent of the pending issue of the Consortium, the Committee stresses once more the importance of the connection between the Universities and LIP, highly beneficial to both partners.

The Committee concludes with a very positive appreciation of the achievements in 2008 and with support for the proposed research programme.



T. Camporesi



C. W. Fabjan



P. G. Innocenti



C. W. E. van Eijk



H. Schopper