

LIP International Advisory Committee
Meeting of 10 April 2008 in Lisbon

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

The LIP International Advisory Committee met in Lisbon on 10 April 2008 to review the 2007 results and discuss the 2008 programme of work.

Prior to the meeting, committee members received a detailed report on the 2007 work as well as a description of the programme for 2008.

In a formal session Committee Members met with members of the LIP Directorate, G. Barreira (Lisbon), J. Carvalho (Coimbra), R. Marques (Coimbra) and M. Pimenta (Lisbon). J. Maneira and A. Onofre, secretaries 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.

During 2007 the most demanding efforts were in particle physics, with accelerators, mainly in preparation of LHC experiments, and in astroparticle physics,

- ATLAS and CMS are proceeding on schedule and the components under the responsibility of LIP have been installed, integrated in the system and tested with cosmic rays. This represent a notable achievement of LIP which concludes more than a decade of construction effort and financial engagement. Preparation for physics is well advanced, both in the studies of simulation and of triggers, and in setting up the computing infrastructure required by analyses.

Notwithstanding the large effort on LHC preparation, other activities have continued and are providing results. COMPASS at CERN is preparing for an extended period of data taking in 2008 and HADES at GSI is installing the RPC-based time-of-flight system constructed by LIP Coimbra. LIP has been a leader in preparing the concluding publications of DELPHI and is heavily engaged in the analyses of NA60, which will be concluded in 2008.

- The main activities in astroparticle physics has been on the Pierre Auger Observatory. LIP Lisbon staff has participated to data taking in Argentina and is currently analysing data. The laboratory has also been active in discussions to prepare for the future station in North America. LIP Coimbra has continued engagement in the search for WIMPs with ZEPLIN, by participating in data taking and analyses. It made a significant impact on ZEPLIN by making available to the Collaboration their invaluable expertise in the Liquid Xenon detector development. The effort on air scintillation is also well targeted at the Auger involvement. Some effort was devoted to neutrino physics with SNO and the preparation of SNO+. AMS preparation

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remained on stand-by, pending a decision on the availability of a space flight. The Coimbra GEM group has made a number of significant contributions to the field of Micro-Pattern Detectors. A strong international collaboration (RD51) has recently be formed to pursue work on such detectors. The committee suggests to the Coimbra GEM group to evaluate participation to this R&D effort.

The Committee supports in full these lines of research and is pleased to see that over the years the efforts of the Laboratory have concentrated on a few main themes where the impact of LIP is highly significant and is recognised internationally.

The GRID computing infrastructure is in operation both in Lisbon and in Coimbra; it is used for LHC computing and made available to other branches of research. The Committee acknowledges the leading role of LIP in promoting, organising and building a computing infrastructure for science (and beyond) in Portugal.


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

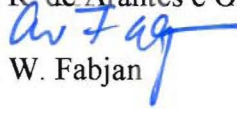
Outreach and training efforts have continued in many forms. To be noted is the success of training Portuguese high school teachers at CERN and the continuing training of young Portuguese graduates, also at CERN.

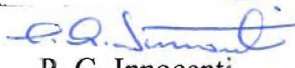
The review expected in 2007, at the conclusion of the first five year contract as Associated Laboratory, has been postponed to 2008. A second five year contract is confirmed but the conditions of the new contract are still under discussion. Over the years of the first contract as Associated Laboratory, the Committee has monitored the improvement related to a personnel policy with long term perspectives and strongly supports the continuation of this regime.

The Committee was informed of the progress in the discussions for new premises for LIP Lisbon, on a common site with other branches of science and of the proposed status of LIP in a Consortium with other Institutions. It was also informed of the request by two groups of theoretical physicist to join LIP. In the views of the Committee a close collaboration with theorists is very desirable and the issue should be actively pursued.

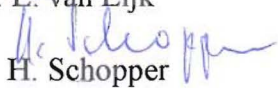
The Committee concludes with a very positive appreciation of the achievements in 2007 and with support for the current research programme.


E. R. de Arantes e Oliveira


C. W. Fabjan


P. G. Innocenti.


C. W. E. van Eijk


H. Schopper