

LIP International Advisory Committee
Meeting of 26 March 2004 in Lisbon

Present: E. R. de Arantes e Oliveira, C. W. E. van Eijk,
P. G. Innocenti, H. Schopper.
Apologies: J. E. Augustin, M. Jacob

The LIP International Advisory Committee met in Lisbon on 26 March 2003 to review the 2003 results and discuss the 2004 programme of work.

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

Subsequently, Committee Members met with the LIP group leaders and discussed results and ongoing research topics

On the following day, Committee Members joined the LIP Scientific Committee in a question-and-answer session with the scientific staff of the Laboratory

The LIP Management informed the Committee of the current financial situation. The 2003 budget was in line with the 2002 reduction, which had caused rescheduling of some activities, such as a GRID project and the moving of LIP Lisbon to new premises. Moreover, late funding, with unpredictable timing, of approved projects generated serious cash flow problems. LIP research relies heavily on financing from the Fundo CERN for all HEP activities other than the construction of the LHC experiments. These include participation in other HEP experiments and developments ensuring the know how of the Laboratory in the field. It was felt that the need for continuity in financing these project and promoting innovation had not been fully appreciated in recent recommendations.

The Committee was pleased to note that the status of LIP as an Associate Laboratory resulted in hiring new staff both in Coimbra and in Lisbon, although these actions took longer than expected, due to financial delays. The more systematic personnel policy LIP can put in place as an Associated Laboratory represents a great advantage with respect to research units at University Departments, which face serious staffing problems at present. It is also an essential component for holding a significant place in international science, where LIP has good visibility and is valued as a reliable partner in collaborations.

The Committee reviewed the results of the research programme of 2002 and discussed the plans for 2003.

After completing the construction of the ATLAS tile calorimeter last year, the LIP team started calibrating the calorimeter modules in a beam at CERN; This activity is continuing

27 April 2004

and performance of the modules is according to specifications. The work for the CMS trigger is proceeding beyond prototyping. Final hardware and software are under construction. In reviewing the progress in the construction of the LHC experiments the Committee reiterated its concern for the additional costs faced by LIP, on top of what is written in the ATLAS and CMS Memoranda of Understanding.

The Portuguese teams in the Delphi and NA50 experiments at CERN are continuing on the data analysis, where they lead in many topics: publications have been submitted and more are in preparation. The NA50 team has joined Compass for the last fixed-target runs before LHC start-up and is looking into the more distant future by participating in a Cherenkov project for Compass.

Developments in instrumentation continued in Coimbra. Resistive plate chambers were tested for time-of-flight measurements in PET; tests on xenon and argon scintillation continued for neutron recoil detection in the n-TOF experiment at CERN and for dark matter searches.

Research on the applications of HEP techniques to medical imaging continued. An important cross-disciplinary project on mammography PET was approved and is currently waiting for substantial financing. An application of GEANT4 for Monte-Carlo simulation of body dosimetry is progressing.

In view of the increasing importance of medical technology and the career possibilities of young scientists in this field, the Committee advised to pay more attention to related subjects, e.g. dosimetry, in the PhD curriculum.

The engagements of LIP in AMS and EUSO were fulfilled: some concerns exist about the future schedule of both the projects.

The Committee was very pleased of the success of the project setting up a cosmic ray observation network in collaboration with high schools. It encouraged LIP to initiate other outreach activities also in view of the Year of Physics in 2005.

The Committee concluded with a very positive appreciation of the results achieved in the past year, despite the difficult funding conditions; it also appreciated both continuity and innovation of the programme. However, as in the previous reviews, a point of concern remains on means and mechanism to ensure stable resources for long range projects.


E. R. de Arantes e Oliveira


P. G. Innocenti.


E. W. E. van Eijk


H. Schopper