

LIP International Advisory Committee
Meeting of 8 March 2002 in Lisbon

Present: E. R. de Arantes e Oliveira, J. E. Augustin, C. W. E. van Eijk,
P. G. Innocenti.

The LIP International Advisory Committee met in Lisbon on 8 March 2002 to review the 2001 results and discuss the 2002 programme of work.

In a formal session Committee members met with members of the LIP Directorate, G. Barreira (chairman, Lisbon), R. Marques (Coimbra), M. Pimenta (Lisbon) and A. Policarpo (Coimbra), and with the secretary of the LIP Scientific Committee, João Carvalho.

Informal discussions with scientific staff of the Laboratory also took place.

The Committee took note of the new status of Associate Laboratory, granted to LIP by the Ministry of Science and Technology, and discussed in detail the positive consequences on the long-term research activity. The availability of long-term positions both for research and for technical staff will help the laboratory to face its engagements in the projects to which it is committed, which, by and large, are on the time scale of a decade or so.

It will also permit LIP to strengthen the links with the Universities, through a more balanced two-way collaboration, covering both research and teaching.

The Committee reviewed the progress of the research programme throughout the year 2001 and went through the planning for 2002.

It noted the wealth of results continuing to be produced by Portuguese teams in the Delphi and NA50 experiments at CERN after the end of data taking, as well as the results produced by the Coimbra team in HERA-B at DESY in a year when data taking had been minimal.

The Committee took note that the work entrusted to LIP in the construction of the ATLAS and CMS detectors for the LHC was on schedule; in particular it was pleased that the construction work taking place in Portugal for the ATLAS tile calorimeter is about to be concluded successfully. Concern was raised on the additional cost to be faced by LIP in the LHC experiments, on top of what is written in the ATLAS and CMS Memorandum of Understanding.

Innovative development in instrumentation continued in 2001 with some openings towards applications. Resistive plate chambers were tested in Coimbra for time-of-flight measurements in PET and for a possible participation in the HADES experiment at GSI. Tests on xenon and argon scintillation continued in Coimbra for neutron recoil detection in the n-TOF experiment at CERN as well as in view of a WIMP search. A program of tests on low temperature silicon detectors is under way at the University of Algarve.

The possibility to employ PET in combination with mammography is being explored. Use of new inorganic scintillators, being developed in the framework of the Crystal Clear Collaboration, coupled to avalanche photodiode arrays will offer innovative prospects.

The opening toward non-accelerator particle physics continued.

The Portuguese group in AMS was active in the calibration of the RICH prototype and in the software for velocity reconstruction.


Following Portugal becoming a member of ESA, LIP has taken steps to participate in the ESA experimental programme through membership in EUSO, an experiment to detect extremely high-energy cosmic rays in space. Given its experience in networking and data processing, LIP is going to propose that the "ground segment" of the experiment, where the data are collected and processed, is located in Portugal. The Committee strongly encourages this proposal.

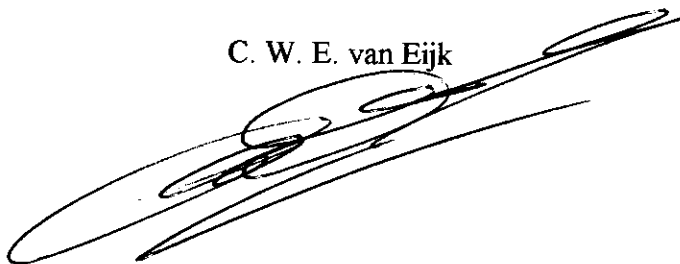
When reviewing the financial situation, the Committee noticed that the allocations to LIP by the "Fundo CERN" meant to cover the year 2002 failed to acknowledge the requests related to the increased expenditure for the construction of ATLAS and CMS. As requests aimed at a partial covering of the additional expenses in this area were already turned down in the previous year by the "Fundo CERN", the Committee wishes to express its deep concern: In the eyes of the Committee, long-range commitments in particle physics should continue to be the top priority for support by the "Fundo CERN".

The Committee welcomes the initiative of the LIP Management to start an upgrade of workshop and laboratory equipment and to improve the safety infrastructure both in Coimbra and in Lisbon and is pleased to hear that upgrades and improvements may materialise in the near future thanks to funds granted by the Portuguese "re-equipment" programme

As a conclusion, the Committee considers the current LIP activity as very successful for results in research projects, for contributions to higher education and for the visibility it gives to Portuguese science on a world scale.


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