

LSC Scientific Committee

18th Meeting

May 16,17 2016

Canfranc Estación, Spain

Summary, Conclusions and Recommendations

The LSC Scientific Committee met at the Canfranc laboratory 16, 17 May to assess progress and to make recommendations on the experimental program. The format of the meeting departed from the previous style in that only a subset of the experiments were invited to present their plans and progress while written only reports were received from the others. This was done to provide more time for a detailed review of major projects at a critical phase of their execution. A detailed report was received from ANAIS where purchase and evaluation of the final NaI crystals is underway. The committee was disappointed by the quality of the first new crystal and there was lengthy discussion in camera and with the project leaders on the best way to proceed. The NEXT project is nearing the completion of construction and about to enter the commissioning phase. CUNA has held a useful workshop on the program for a future nuclear-astronomy facility and has identified a used accelerator which might provide a lower cost option towards a facility. ArDM has completed their Phase I run and has developed their plans for future running in a 2 phase mode. Finally, the committee received an LOI from Univ. of Zaragoza for a project called T-REX which plans to search for low mass WIMPS using micromegas detection techniques at low threshold. The committee received written reports on progress on the GEODYN, Gollum and SuperKGD projects. These were appreciated.

The committee also received a presentation on the usefulness of a general purpose water shield as a laboratory facility. It is clear that such a facility could become a valuable infrastructure and attract potential new experiments to the laboratory. The committee looks forward to further details at its future meetings.

This meeting marks the first year of Aldo Ianni's Directorship of the laboratory. The committee remains very pleased with the initiatives that he has taken and the progress of the experimental program under his stewardship. The Committee received two LOIs for new projects at this meeting. One (T-REX) is discussed below while the second is an initiative in underground biology and it was agreed that discussion of this LOI should wait until our next meeting at which we will have a biologist to advise the committee.

The next meeting of the Scientific Committee is set for 2, 3 December, 2016

Finally, the Committee thanks Ariella Cattai and Concha González-García for their many years of dedicated service and their contributions to the work of the committee. Their insights and guidance will be greatly missed.