

SUMMARY AND CONCLUSIONS

5th Meeting of the LSC Scientific Committee

October 22-23, 2009

The meeting was convened at 09:00 Thursday, 22 October, 2009 in Canfranc. Present were: Elena Aprile, Frank Avignone (Chair), Alessandro Bettini (Laboratory Director), Juan Fuster, Belen Gavela, Chang-Kee Jung, Masayuki Nakahata, and José Angel Villar. Laura Baudis joined the meeting via Skype. Andres Gadea had justified his absence.

We were honored to be joined for part of the day by Joaquin Serrano Agejas and Angela Fernandez of the Ministerio de Ciencia e Innovacion, and Jose Luis Serrano of the Government of Aragon.

The Committee held a closed session from 09:00 to 09:30 to discuss the status of the letters of intent and required reports. Mr. Nakahata will be referee of ROSEBUD (with L. Baudis) and ArDM (with E. Aprile). The Director reported that ULTIMA would not be present, while also BiPo would not be present due to a miscommunication internal to the Collaboration. The BiPo Spokesman apologized and promised a written report forthwith.

At 09:30 the Open Session began. Director Bettini gave a comprehensive report on the progress of the structural repairs to the Laboratory. He anticipates that the repairs will be completed between the late spring and mid summer of 2010. He also gave a detailed report on the progress of the external building, which will be completed by the end of 2010 (if the cold winter period will not be too long). Later the committee and visitors made a tour of the underground facility to observe the progress.

The Committee heard oral reports from ROSEBUD (EXP-02), ANAIS (EXP-01), Status Reports from NEXT (EXP-05) and ArDm, and an LoI presentation from SUPERKGD.

In closed sessions the Committee and the Director discussed the EoI of the CUNA and the LoI of the GEODYN Collaborations. In addition, the Committee encouraged the Director to purchase 100-kg of Xe enriched in ¹³⁶Xe, and 100kg of the tails depleted in ¹³⁶Xe, as property of the Laboratory. A written report was finalized after the meeting and approved on the subject.

Findings and Recommendations

1. The Committee confirmed its recommendation of ROSEBUD running for three years starting when they have access to the Laboratory.
2. The Committee was positively impressed with the NEXT presentation, and the reported technical progress. The Committee requested a written report with some specific data.
3. The Committee requested a written progress report to BiPo, and noted that the experiment had earlier been approved for three years after they have access to the Laboratory.

4. The presentation of the Argon Dark Matter Experiment (ArDm) was very complete; however, no written document has been submitted by the collaboration. Many unanswered questions remain. These answers are needed for the definition of the scientific program of the Laboratory and its planning. The Committee requested a complete Letter of Intent by August 2010.
5. Masayuki Nakahata left the meeting during the discussion on SUPERKGD. The presentation of the project was well received by the Committee, which voted to recommend its approval.
6. Based on the recommendations of outside consultants, Hans Thybo of the University of Copenhagen and of Sierd Cloetingh of the University of Amsterdam, the committee voted to recommend the approval the GEODYN proposal.

The Committee discussed possible dates for the next meeting. The options were 15-16 April 2010, and the week of 26 April, for example 27-28 April. After the meeting, in agreement with members that were not present the date was fixed to be 15-16 April 2010.