LSC Scientific Committee 15th Meeting

November 20, 21, 2014 Canfranc Estación, Spain

Summary, Conclusions and Recommendations

The committee was pleased with the overall progress being made in the past 6 months at the laboratory. Since the last meeting in May, the ArDM experiment has begun taking data with the detector filled with argon gas, both at room temperature and at temperatures up to 200 degrees colder. It has now started to fill with liquefied argon and should be the first noble liquid dark matter detector to operate at the tonne scale. Excellent progress is being made in the construction of the NEXT demonstrator experiment exploring new ways to search for neutrinoless double beta decay. LSC is now a part of the wider seismic network with a unique low noise facility. The first measurement of DNA from organisms trapped within surface rocks has been made. This is a stepping-stone to a study of underground biology. A new prototype NaI crystal is expected at the laboratory in a few months which will allow a critical test of the feasibility of the ANAIS dark matter search.

This exciting and diverse program of research is a direct reflection on the Director, Professor Bettini. Without his vision, breadth of scientific expertise, attention to safety and management skill, the laboratory would never have reached this point. The committee is alarmed to realize that Professor Bettini's term as Director is coming to an end. The committee strongly urges the authorities to ensure that a new director of Prof. Bettini's international scientific stature be found to fill this position. This will be important to maintain the international visibility that the laboratory has established. It is normal for a search for such a person to take some time. Thus, the committee further urges that arrangements be made to ensure an overlap or reasonable duration between the new person found to fill the position, and the current Director. It would be particularly damaging to the laboratory if there were an interval between Directors.