ALBA Synchrotron Light Source

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ALBA synchrotron light source (www.cells.es) is the largest Spanish research infrastructure that started full operation of its first 7 beamlines on February 2013. I will divide the talk in three parts: i) the general description of the facility; ii) the seven bealines and current ALBA usage; and iii) the future ALBA beamlines and possibilities for collaboration. Two beamlines (phase-II) are under construction and six proposals for new beamlines (phase-III) have been positively evaluated by ALBA-SAC (Scientific Advisory Committee).

I will start with a very brief description of the facility including the construction costs, staff structure and general parameters. Then, I will briefly describe our three accelerators: LINAC, booster and the store ring. Some characteristic parameters will be described. To finish this part, I will touch the three main magnetic technologies to produce X-rays from the ALBA electron beam.

Secondly, I will concisely describe the seven beamlines with their main application fields. A photography of our experimental hall with a Table displaying the seven current beamlines is shown just below. The ways to use ALBA including the call-for-proposals will be described. The proposals (both national and internationals) are judged by an international panel on the basis of scientific excellence.

Thirdly, I will briefly explain the current phase II with the construction of two beamlines, infrared microspectroscopy and angular-resolved photoemission. Finally, I will then present the plans for the phase-III beamlines as well as examples of ways to collaborate with ALBA synchrotron.