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The new Nanomotion laboratory at ALBA

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The ALBA Synchrotron has recently opened a Nanomotion Laboratory to support the upcoming ALBA II upgrade to a 4th-generation light source. The laboratory is dedicated to research, development, and commissioning of high-performance motion-and-positioning instrumentation, control systems, and synchronisation between components. It is operated as a clean room with particles, humidity, pressure and temperature control, built in the Experimental Hall to benefit from the main slab's vibration isolation. This work presents the laboratory's specialised spaces, infrastructure, and capabilities, together with commissioning data that verify the design specifications. We also highlight current collaborations within ALBA and invite external partners to explore joint projects that leverage the laboratory resources.

Footnotes

Funding Agency

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