

## **XEMIS2 : Current status, results and outlooks**

*Tuesday, 19 May 2026 11:15 (30 minutes)*

The XEMIS2 medical imaging device is a liquid Xenon (LXe) time projection chambre operating as a Compton telescope installed at Nantes University Hospital, France. XEMIS2 has started its commissioning in 2025 thanks to the commitment of technical and research teams of Subatech Laboratory (Nantes, France). After an overview of the XEMIS2 installation, this talk will present the first operation of the completely autonomous Xenon liquefaction and purification system with the detector fully assembled, the characterization of the light and charge data acquisition system at room and LXe temperature and preliminary LXe purity assessments. This milestone marks the beginning of a rich scientific program with the characterization and imaging of very low-activity sources emitting 1, 2 and 3 high-energy gamma-rays. In this context, the outlooks about XEMIS2 exploitation will be presented.

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**Session Classification:** Medical applications

**Track Classification:** Medical applications