

The joint virtual event of the African Light Source AfLS-2024 (7th) and the African Physical Society AfPS2024



Type: not specified

What is Brilliant and BRIGHT at the Australian Synchrotron

Tuesday, 19 November 2024 09:00 (30 minutes)

 $The Australian \, {\it Nuclear Science \& Technology Organisation (ANSTO) operates, maintains, and develops a wide range of research infrastructure (worth `1billion) for the bene fit of all Australians, including some of the large stress earch facilities and the stress of the large stres$

The Australian Synchrotron generates brilliant beams of infrared and X-ray synchrotron light for use in a vast array of scientific research – studies in radiotherapy, biomedical imaging and 3-D computed tomography; macromolecular crystallography for the study of the biomolecular basis of disease and the development of new medicines; agricultural, environmental and climate change research; studies in advanced electronics and advanced energy materials; planetary sciences; engineering; advanced manufacturing; and cultural heritage studies. The Australian Synchrotron currently hosts over 1000 experiments per annum across its 14 operational beamlines and is currently in the middle of the 100 million BRIGHTProgram todesign, buildandcommission thenewsuite of next– generation beamlines at the facility.

This presentation will showcase recent capability upgrades, as well as a range of impactful research outcomes from the Australian Synchrotron in the fields of health, advanced and energy materials, environmental and climate change research, engineering materials and cultural heritage studies. I will also highlight the new research capabilities from our next-generation BRIGHT Beamlines and look to the future of Synchrotron research capabilities for Australia.

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Track Classification: AfLS