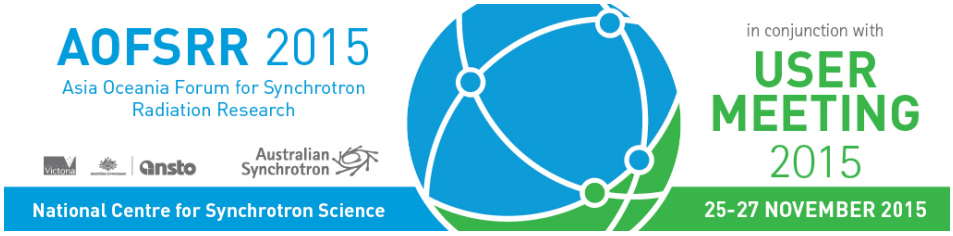

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Two-plane holography with customizable references

Friday, 27 November 2015 13:30 (45)

Fourier-transform holography is an established method of high-resolution coherent x-ray imaging, but is limited by the need to fabricate highly specific reference structures. Traditional reference structures must be coplanar with the sample, and are typically fabricated along with the sample. We have recently developed the technique of holography using an arbitrary customizable reference, greatly enhancing the flexibility of experimental geometries and allowing for the reference scatterer to be upstream of the sample. In this way, holography can be offered as a permanent technique provided by a coherent imaging beamline, rather than requiring a sample modification fabricated by the user. We will present the first results obtained at the Soft X-Ray Imaging branchline at the Australian Synchrotron.

Keywords

holography; coherent diffractive imaging

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