



USER MEETING 2016

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National Centre for Synchrotron Science



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Australian Synchrotron

Contribution ID : 203

Type : Poster

Proposal for Ultra-low Emittance Measurements on IMBL with an X-ray Interferometer

The Australian Synchrotron storage ring has achieved a world record low vertical emittance below 1 pm rad. These beam parameters produce very small beam sizes which are hard to accurately measure. This proposal is to test an Young's Double slit X-ray interferometer on the long baseline of the IMBL to measure vertical electron beam sizes down to 1.6 μm . These measurements will be part of the vertical emittance reduction research program with the goal of reaching the quantum limit of vertical emittance.

Keywords or phrases (comma separated)

Are you a student?

No

Do you wish to take part in the Student Poster Slam?

No

Are you an ECR? (<5 yrs since PhD/Masters)

No

What is your gender?

Male

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Track Classification : Technique Development