XSD Special Presentation: (8/4/06) Microtomography at BESSY's BAMline and 3D image analysis for studying pore evolution in metallic foams

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- *Subject*: XSD Special Presentation: (8/4/06) Microtomography at BESSY's BAMline and 3D image analysis for studying pore evolution in metallic foams
- *From*: Barbara Meurer <bmeurer@aps.anl.gov>
- *Date*: Tue, 01 Aug 2006 08:49:06 -0500

XSD SPECIAL PRESENTATION

SPEAKER:
Alexander Rack
Institut fuer Synchrotronstrahlung
Research Center Karlsruhe

TITLE:
Microtomography at BESSY's BAMline and 3D image analysis
for studying pore evolution in metallic foams

DATE:
August 4, 2006

TIME:
11:00 a.m.

PLACE:
Bldg. 402 - E1100/E1200

HOST:
Christoph Rau

Microtomography at BESSY’s BAMline and 3D image analysis for studying pore evolution in metallic foams

The Federale Institute for Materials Research and Testing (BAM) together with the Hahh-Meitner-Institut Berlin is running a setup for microtomography at BESSY’s BAMline (Germany). In this talk the instrumentation is introduced with a special focus on the scintillators and optics (visible light) used in order to overcome some of the limitations of a moderate flux beamline for high resolution imaging. Furthermore, 3D image analysis by means of algorithms based on transformations known from stochastic geometry will be presented, with exemplary application on the pore evolution in early expansion stages of metallic foams.