

Detailed Program

2nd workshop for Extreme Conditions Research in a Large Volume Press at PETRA III

At Seminar room 456, Bldg. 25f, DESY, Hamburg, Germany

September 10-11, 2012

Program of Events

Monday, September 10 (Day1):

11:30 - 13:00 Registration

13:00 - 13:15, **Edgar Weckert** (DESY, Germany)

Welcome

13:15 - 13:30, **Wolfgang Drube** (DESY, Germany)

PETRA III extension

13:30 - 14:00, **Yanbin Wang** (GSECARS, University of Chicago, USA) **invited**

Large-volume high-pressure research with synchrotron radiation for in-situ studies of earth and planetary materials

14:00 - 14:15, **David Dobson** (University College London, UK)

Material Properties measurements using synchrotron X-radiography

14:15 - 14:30, **Nadege Hilairet** (CNRS, Universite Lille 1, France)

Aseismic Deformation of Dehydrating Serpentinite

14:30 - 14:45, **Paul Raterron** (CNRS, Universite Lille 1, France)

Deformation of Earth Mantle Materials in the D-DIA Coupled with Synchrotron Radiation

14:45 - 15:15, coffee break

15:15 - 15:45, **Tetsuo Irifune** (GRC, Ehime University, Japan) **invited**

Recent activities of Ehime group at BLO4B1, SPring-8

15:45 - 16:00, **Hans J. Mueller** (Deutsches GFZ, Germany)

Measuring Elastic and Inelastic Properties under Simulated Earth's Mantle Conditions in Conjunction with Synchrotron X-Radiation

16:00 - 16:15, **Natalia Dubrovinskia** (University of Bayreuth, Germany)

LVP technique for synthesis and investigations of novel materials

16:15 - 16:30, **Marcus Schwarz** (TU-Bergakademie Freiberg, Germany)

Advanced Ceramics and New Assemblies with low X-ray Absorption for High Pressure-High Temperature Multianvil Synchrotron

16:30 - 16:45, **Norimasa Nishiyama** (DESY, Germany)

Synthesis of nanopolycrystalline stishovite using Kawai-type multi-anvil apparatus

17:00 - 18:00, poster presentations and coffee break (ground floor, 25f)

19:00 - 22:00, Workshop dinner (DESY bistro)

Tuesday, September 11(Day2):

08:55 - 09:00, Announcement

09:00 - 09:15, **Masashi Hasegawa** (Nagoya University, Japan) *invited*

Synthesis and crystal growth of novel materials in high pressure and temperature using diamond anvil cell and laser heating

09:15 - 09:30, **Tomoo Katsura** (BGI, University of Bayreuth, Germany)

Possible high-energy X-ray diffraction studies at the LVP beam line in PETRA III Extension

09:30 - 09:45, **Simon Hunt** (University College London, UK)

X-radiography based method for measuring thermal diffusivity under in-situ conditions

09:45 - 10:00, **Chrystele Sanloup** (University of Edinburgh, UK)

Structure and density of silicate melts using large-volume presses

10:00 - 10:15, **Oliver Beermann** (Universitat Kiel, Germany)

From high to moderate p/T -conditions - in situ insights to core formation scenarios as well as to magmatic and volcanic processes

10:15 - 10:45, coffee break

10:45 - 11:00, **Norimasa Nishiyama** (DESY, Germany) beamline, LVP equipment, detectors

11:00 - 12:00, Discussion

Poster presentations

Fabrice Brunet (ISTERRE - CNRS, France)

Hanns-Peter Liermann (DESY, Germany)

Tony Bell (DESY, Germany)

Norimasa Nishiyama (DESY, Germany)