

Sunday May 17 <sup>th</sup>		
18:00	Pre-registration at Novotel Hamburg Arena	
Monday May 18 <sup>th</sup>		
8:30 – 8:45	Welcome	<b>H. Franz</b>
<b>Session 1: Extreme Condition Research: State of the Art</b> <b>Chair: H. Franz</b>		
8:45 – 9:30	Overview in Solid State Chemistry – The laser-heated DAC as a reaction chamber	<b>B. Winkler</b>
9:30 – 10:15	Extreme Condition Research: State of the Art in Geophysics	<b>D. Andrault</b>
10:15 – 10:30	Coffee Break	
<b>Session 2: Existing extreme condition synchrotron facilities</b> <b>Chair: H.-P. Liermann</b>		
10:30 – 11:15	The high pressure diffraction beamline ID09A at the ESRF	<b>M. Hanfland</b>
11:15 – 12:00	ID27, a state-of-the-art XRD beamline for research at extreme pressures and temperatures	<b>M. Mezouar</b>
12:00 – 13:15	Lunch	
13:15 – 14:00	High Pressure Research at GSECARS	<b>M. Rivers</b>
14:00 – 14:45	Advancing HP-SR Research at HPCAT and HPSynC	<b>Ho-kwang Mao</b>
<b>Session 3: Research Focus and design of the Extreme Conditions Beamline</b> <b>Chair: W. Morgenroth</b>		
14:45 – 15:15	Overview PETRA III	<b>H. Franz</b>
15:15 – 15:45	The Extreme Conditions Beamline at PETRA III, DESY: Possibilities to conduct time resolved monochromatic and pink beam diffraction experiments in laser heated DAC	<b>H.-P. Liermann</b>
15:45 – 16:00	Discussion	
16:00 – 16:15	Coffee Break	
<b>Session 4: Technical Challenges for an Extreme Conditions Beamline</b> <b>Chair: M. Rivers</b>		
16:15 – 17:00	White-beam micro Laue-diffraction with an undulator	<b>G. Ice</b>
17:00 – 17:45	Submicron diffraction at ALS beamline 12.3.2	<b>M. Kunz</b>
<b>Session 5: Examples for Powder and Single Crystal Diffraction at simultaneous high-pressure and high/low-temperatures</b> <b>Chair: H.-P. Liermann</b>		
17:45 – 18:30	Tayloring electronic properties by high pressure	<b>U. Schwarz</b>
18:30 – 19:30	Poster Session & Initial Meeting of the Technical Advisory Committee	
19:30	Workshop Dinner	

<b>Tuesday May 19<sup>th</sup></b>		
8:30 – 8:45	Announcements and Miscellaneous	<b>H.-P. Liermann</b>
<b>Session 6: Dynamic Single Crystal Diffraction at simultaneous high-pressure and -temperatures</b> <b>Chair: B. Winkler</b>		
8:45 – 9:30	Single crystal diffraction at ultrahigh pressure	<b>P. Dera</b>
9:30 – 10:15	Laser-heating and synchrotron measurements	<b>R. Boehler</b>
10:15 – 10:30	Coffee Break	
10:30 – 11:15	X-ray diffraction experiments with internally and externally electrically heated DACs	<b>L. Dubrovinsky</b>
11:15 – 12:00	Structural, magnetic and electronic transitions in 3d-metal oxides under super high pressures	<b>I. S. Lyubutin</b>
12:00 – 13:15	Lunch	
<b>Session 5 (continued): Examples for Powder and Single Crystal Diffraction at simultaneous high-pressure and high/low-temperatures</b> <b>Chair: M. Kunz</b>		
13:15 – 14:00	Single crystal studies of elemental systems	<b>M. McMahon</b>
14:00 – 14:45	The Dynamic Diamond Anvil Cell (dDAC): A Novel Device for Studying the Dynamic Properties of Materials at High Pressure	<b>W. J. Evans</b>
14:45 – 15:00	Coffee Break	
15:00 – 15:45	Brillouin Scattering at High Pressures and Temperatures: Potential Applications at a 3 <sup>rd</sup> Generation Synchrotron Source such as PETRA III	<b>S. Speziale</b>
15:45 – 16:30	Plastic properties of minerals at high-pressure and -temperatures	<b>S. Merkel</b>
16:30 – 16:45	Coffee Break	
16:45 – 18:00	Discussion	<b>H.-P. Liermann, B. Winkler</b>
18:00 – 19:00	Technical Advisory Committee Meeting	