



# 2017 FELBE User Workshop

April 24-25, 2017

Monday April 24		Building 114, Room 201/202
13:30 – 14:00	<b>Registration + Coffee</b>	
14:00 – 15:00	<p>14:00 – 14:15  <b>Welcome and Opening Remarks</b>  Manfred Helm, <i>HZDR</i></p> <p>14:15 – 14:35  <b>FELBE, the new U37 undulator, and Future Developments + ELBE overview</b>  Ulf Lehnert, <i>HZDR</i></p> <p>14:35 – 14:47  <b>Experimental Capabilities @ FELBE</b>  Stephan Winnerl, <i>HZDR</i></p> <p>14:47 – 15:00  <b>High-field High-Repetition-Rate THz facility, TELBE</b>  Michael Gensch, <i>HZDR</i></p>	
15:00 – 16:10	<p><b><u>Quantum Phenomena</u></b>  <i>Session Chair:</i> Hartmut Roskos</p> <p>15:00 – 15:25  <b>Exciton-polaritons in a strong THz field - doubly dressed bosons</b>  Barbara Pietka, <i>University of Warsaw</i></p> <p>15:25 – 15:45  <b>Three-dimensional topological insulators probed by photogalvanic spectroscopy</b>  Helene Plank, <i>University of Regensburg</i></p> <p>15:45 – 16:10  <b>Excited state dynamics of semiconductor quantum wells excitons</b>  Sangam Chatterjee, <i>University of Giessen</i></p>	
16:10 – 16:40	<b>Coffee break + Posters</b>	
16:40 – 18:00	<p><b><u>Semiconductor Physics &amp; Near-Field Microscopy</u></b>  <i>Session Chair:</i> Sangam Chatterjee</p> <p>16:40 – 17:15  <b>Carrier dynamics in semiconductors studied with FEL radiation: Plasmas in field-effect transistors and nonlinear atomic physics with impurities</b>  Hartmut Roskos, <i>University of Frankfurt</i></p> <p>17:15 – 17:35  <b>Quantum interference phenomena in narrow-gap semiconductors</b>  Johannes Bühler, <i>University of Konstanz</i></p> <p>17:35 – 18:00  <b>Near-field infrared nanoscopy at FELBE</b>  Susanne C. Kehr, <i>TU Dresden</i></p>	
18:30	<b>Depart for dinner in Dresden</b>	

Tuesday April 25

Building 114, Room 201/202

<b>9:00 – 10:35</b>	<b><u>Ultrafast Dynamics in THz Detector Physics</u></b> <i>Session Chair:</i> Boris Knyazev  9:00 – 9:25 <b>Ultrafast field effect transistor-based detectors for high power THz facilities</b> Sascha Preu, <i>University of Darmstadt</i>  9:25 – 9:50 <b>Carrier recombination in doped silicon and germanium</b> Heinz-Wilhelm Hübers, <i>DLR and Humboldt University Berlin</i>  9:50 – 10:15 <b>Pump-probe study of group-V donor relaxation in uniaxially stressed silicon</b> Valery Shastin, <i>RAS, Nizhny Novgorod</i>  10:15 – 10:35 <b>Capture of photoexcited electrons into deep donor centers in silicon studied by time-resolved spectroscopy at FELBE</b> Nils Deßmann, <i>DLR and Humboldt University Berlin</i>
<b>10:35 – 11:05</b>	<b>Coffee break + Posters</b>
<b>11:05 – 12:20</b>	<b><u>Superconducting Materials &amp; NovoFEL</u></b> <i>Session Chair:</i> Heinz-Wilhelm Hübers  11:05 – 11:30 <b>Terahertz Nonlinearities in Cuprate Superconductors - Revealing and Controlling Phase Coherences</b> Srivats Rajasekaran, <i>MPDS Hamburg</i>  11:30 – 11:55 <b>Dynamics of superconductors excited by narrowband THz pulses</b> Jure Demsar, <i>University of Mainz</i>  11:55 – 12:20 <b>Novosibirsk free electron laser as user facility: a review</b> Boris Knyazev, <i>Budker Institute, Novosibirsk</i>
<b>12:20 – 13:05</b>	12:20 – 13:00 <b>Open Forum for User Comments/Suggestions/Questions</b> Wolfgang Seidel / J. Michael Klopff, <i>HZDR</i>  13:00 – 13:05 <b>Closing Remarks</b> Manfred Helm, <i>HZDR</i>
<b>13:05 – 14:00</b>	<b>Group Photo + Lunch break</b>
<b>14:00</b>	<b>Lab tour</b> <i>ELBE (Building 540)</i>
<b>17:00</b>	<b>InTerFEL closed session</b> <i>Building 110, Room 230</i>
	<b>Lab tour</b> <i>ELBE (Building 540)</i>

# Posters

## **Low-temperature near-field spectroscopy at FELBE**

Denny Lang, *HZDR, Institute of Ion Beam Physics and Materials Research*

## **Electron bunch length characterization at the Metrology Light Source using THz radiation**

Andreas Pohl, *DLR and Humboldt University Berlin*

## **Towards time-resolved nanoscopy with NIR to deep THz radiation**

Frederik Kuschewski, *TU Dresden, Institute of Applied Physics*

## **Terahertz narrowband pump – broadband probe spectroscopy of intersubband transitions in a wide single quantum well**

Johannes Schmidt, *HZDR, Institute of Ion Beam Physics and Materials Research*

## **FELBE, The THz/IR FEL User Facility**

J. Michael Klopf, *HZDR, Institute of Radiation Physics*

## **CALIPSOplus - Removing barriers for access to accelerator-based light sources**

Barbara Schramm, *HZDR, Research programmes and International Projects*

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## **Special Thanks to:**

- All of our Speakers and Presenters

- The FELBE Workshop Team

*Barbara Schramm*

*Stephan Winnerl*

*Alexej Pashkin*

*J. Michael Klopf*

