# PIER Graduate Week 2022

Interdisciplinary lecture and workshop week for PhD students

## Course Overview

### Graduate Week 2022

<table>
<thead>
<tr>
<th>Time</th>
<th>Course</th>
<th>Monday, 21 FEB</th>
<th>Tuesday, 22 FEB</th>
<th>Wednesday, 23 FEB</th>
<th>Thursday, 24 FEB</th>
</tr>
</thead>
<tbody>
<tr>
<td>09:00</td>
<td>/ A1 Introductory course Particle &amp; Astroparticle Physics</td>
<td>Gregor Kasieczka, Universität Hamburg</td>
<td>Gregor Kasieczka, Universität Hamburg</td>
<td>Tilman Plehn, Universität Heidelberg</td>
<td>Artur Lobanov, Universität Hamburg</td>
</tr>
<tr>
<td>09:00</td>
<td>/ A2 Introductory course Nanoscience</td>
<td>Irene Fernandez-Cuesta, Universität Hamburg</td>
<td>Helmut Schiff, Paul Scherrer Institute</td>
<td>Stefan Sylvest Keller, Technical University of Denmark</td>
<td>Dorota Koziej, Universität Hamburg</td>
</tr>
<tr>
<td>10:30</td>
<td>“Nanofabrication techniques”</td>
<td>“Nanoimprint and 3D lithography”</td>
<td>“Carbon micro- and nanofabrication for health tech, life science and energy applications”</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11:00</td>
<td>/ B1 Introductory course Infection &amp; Structural Biology</td>
<td>Baris Tursun, Universität Hamburg</td>
<td>Baris Tursun, Universität Hamburg</td>
<td>Stefan Hoth, Universität Hamburg</td>
<td>Stefan Hoth, Universität Hamburg</td>
</tr>
<tr>
<td>12:30</td>
<td>“Cellular safeguarding in the context of Reprogramming and Aging I”</td>
<td>“Cellular safeguarding in the context of Reprogramming and Aging II”</td>
<td>“Plant pathogen defense meets structural biology I”</td>
<td>“Plant pathogen defense meets structural biology II”</td>
<td></td>
</tr>
<tr>
<td>12:30</td>
<td>/ B2 Introductory course Photon Science</td>
<td>Kartik Ayyer, MPSD Hamburg</td>
<td>Kartik Ayyer, MPSD Hamburg</td>
<td>Daniela Rupp, ETH Zürich</td>
<td>Marc Vrakking, MBI Berlin</td>
</tr>
<tr>
<td>14:00</td>
<td>“Diffractive Imaging”</td>
<td>“Diffractive Imaging”</td>
<td>“Diffractive imaging of nanoparticle structures and dynamics”</td>
<td>“Velocity Map Imaging”</td>
<td></td>
</tr>
</tbody>
</table>

**Coffee break**

**Lunch break**

Programme & registration: [graduateschool.pier-hamburg.de/gradweek2022](http://graduateschool.pier-hamburg.de/gradweek2022)
<table>
<thead>
<tr>
<th>Time</th>
<th>Course</th>
<th>Monday, 21 FEB</th>
<th>Tuesday, 22 FEB</th>
<th>Wednesday, 23 FEB</th>
<th>Thursday, 24 FEB</th>
</tr>
</thead>
</table>
| 14:00-15:30 | / C1 Focus course Particle & Astroparticle Physics | Georg Weiglein, DESY  
"Window to New Physics via the Precision Frontier" | Sven Heinemeyer, IFT (UAM/CSIC), Madrid  
"Window to New Physics via the Precision Frontier" | Sven Heinemeyer, IFT (UAM/CSIC), Madrid  
"Window to New Physics via the Precision Frontier" | Georg Weiglein, DESY  
"Window to New Physics via the Precision Frontier" |
| 15:30-16:00 | / C2 Focus course Photon Science | Karl K. Berggren, MIT, Cambridge  
"Superconducting Nanowire Single-Photon Detectors" | Daniela Rupp, ETH Zürich  
"Coherent Diffraction Imaging in the soft X-ray regime: a three-dimensional view on nanoparticles and their ultrafast dynamics" | Sebastian Trippel, DESY/Universität Hamburg  
"Advanced 3D Electron/Ion Detection" |
| 15:30-16:00 | / C3 Transferable skills | Alexander Britz  
"Basic Python for Scientific Computing"  
moved to 28 February - 2 March 2022 | Alexander Britz  
"Advanced Python for Scientific Computing"  
moved to 2 + 3 March 2022 | | |
| 16:00-18:00 | / D1 Focus course Infection & Structural Biology | Jens Bosse, HPI/ MHH / CSSB  
"How virus particles are assembled: Spatiotemporal orchestration of virus morphogenesis" | Christian Löw, EMBL / CSSB  
"Membrane protein structural biology" | Holger Sondermann, DESY/CSSB  
"Structural and functional microbiology" | Maya Topf, HPI/UKE/ CSSB & Jan Kosinski, EMBL/CSSB  
"Integrative Modeling" |
| 16:00-17:30 | / D2 Focus course Nano Science | Irene Fernandez-Cuesta, Universität Hamburg  
"Nanostructures and nanoimaging" | Victor Cadarso Busto, Monash University  
"Lab on a Chip"  
Changed lecture time: 8 - 9:30 p.m. | Silvan Schmid, TU Vienna  
"Nanodevices with resonators" | Ivan Vartaniants, DESY/NRNU "MEPhl"  
"Nanooptics with coherent X-Rays" |
| 17:30-18:00 | / D3 Transferable skills | Nicola Findeis  
"Project management for PhD students"  
moved to 28 February + 1 March 2022 | | | |
| 18:00-19:30 | / D4 Transferable skills | Nicola Findeis  
"Project management for PhD students"  
moved 3 + 4 March 2022 | | | |