## 5-8 Oct 2015

CFEL, Bahrenfeld Campus, Hamburg

Programme and registration www.pier-hamburg.de/graduateweek2015



## **Course overview PIER Graduate Week 2015**

	Time	Monday, 5 October	Tuesday, 6 October	Wednesday, 7 October	Thursday, 8 October	
Morning sessions: Introductory courses Registration open from 8:30	09:00 – 10:30	A1 Introductory course Photon Science Robin Santra Fundamental processes in photon-matter interactions SR II  A2 Introductory course Infection and Structural Biology Holger Rohde Basic principles in bacteriology: From clinical symptoms to diagnostic procedures and treatment standards SR III	A1 Introductory course Photon Science Robin Santra Fundamental processes in photon-matter interactions SR II  A2 Introductory course Infection and Structural Biology Holger Rohde Are we entering the post-antibiotic era? Emerging multi resistant bacteria as a major threat for public health SR III	A1 Introductory course Photon Science Robin Santra Fundamental processes in photon-matter interactions SR II  A2 Introductory course Infection and Structural Biology Nicole Fischer Viruses relevant to human infections SR III	A1 Introductory course Photon Science Robin Santra Fundamental processes in photon-matter interactions SR II  A2 Introductory course Infection and Structural Biology Nicole Fischer Emerging viruses and how to use new technologies to hunt for viruses SR III	
	10:30 – 11:00	Coffee break				
	11:00 – 12:30	B1 Introductory course Particle and Astroparticle Physics  Bernhard Schmidt  Bright beams for Higgs hunting — the art of accelerating particles SR II  B2 Introductory course Nanoscience Eva Weig Playing the nanoguitar: An introduction to nanomechanical systems	B1 Introductory course Particle and Astroparticle Physics  Bernhard Schmidt  Bright beams for Higgs hunting — the art of accelerating particles SR II  B2 Introductory course Nanoscience Elke Scheer Electronic transport at the nanoscale SR III	B1 Introductory course Particle and Astroparticle Physics  Bernhard Schmidt  Bright beams for Higgs hunting — the art of accelerating particles SR II  B2 Introductory course Nanoscience Fabio Pistolesi Nanoelectromechanics SR III	B1 Introductory course Particle and Astroparticle Physics  Bernhard Schmidt  Bright beams for Higgs hunting — the art of accelerating particles SR II  B2 Introductory course Nanoscience Heiner Linke Nanothermoelectrics — motivation and status SR III	

12:30-14:00 **Lunch break** 

	Time	Monday, 5 October	Tuesday, 6 October	Wednesday, 7 October	Thursday, 8 October		
Afternoon sessions: Focus courses & skills	14:00 – 15:30	C1 Focus course Photon Science Andreas Schönle Super-resolved fluorescence microscopy: Concepts and applications SR II	C1 Focus course Photon Science Andreas Schönle Super-resolved fluorescence microscopy: Concepts and applications SR II	C1 Focus course Photon Science Ian Robinson X-ray coherence in optical design SR II	C1 Focus course Photon Science lan Robinson X-ray coherent diffraction analysis of materials SR II		
		C2 Focus course Infection and Structural Biology Michael Otto Staph infections: toxins, biofilms, and antibiotic resistance SR III	C2 Focus course Infection and Structural Biology Michael Otto Staphylococcus epidermidis — beneficial microbe and opportunistic pathogen SR III	C2 Focus course Infection and Structural Biology Thomas Pietschmann Hepatitis C – time of change SR III	C2 Focus course Infection and Structural Biology César Muñoz-Fontela Immunology of Ebola virus in mice and humans SR III		
		C3 Leadership skills (group A) Rob Thompson SR I	C3 Leadership skills (group A)  Rob Thompson  SR I	C3 Leadership skills (group A)  Rob Thompson  SR I	C3 Leadership skills (group A)  Rob Thompson  SR I		
		C4 Presentation skills (group A)  Elena Kaufman  SR V	C4 Presentation skills (group A)  Elena Kaufman  SR IV	C4 Presentation skills (group A)  Elena Kaufman  SR IV	C4 Presentation skills (group A)  Elena Kaufman  SR V		
	15:30 – 16:00	Coffee break					
Afternoon sessions: Focus courses & skills	16:00 – 17:30	D1 Focus course Particle and Astroparticle Physics  Matthias Kadler  Black-hole jets in the universe SR II	D1 Focus course Particle and Astroparticle Physics  Matthias Kadler  Black-hole jets in the universe  SR II	D1 Focus course Particle and Astroparticle Physics  Matthias Kadler Black-hole jets in the universe SR II	D1 Focus course Particle and Astroparticle Physics  Matthias Kadler  Black-hole jets in the universe  SR II		
		D2 Focus course Nanoscience Eva Weig Cavity nano-optomechanics SR III	D2 Focus course Nanoscience Elke Scheer Introduction to molecular electronics SR III	D2 Focus course Nanoscience Fabio Pistolesi Nanoelectromechanics SR III	D2 Focus course Nanoscience Heiner Linke Quantum dits and nanowires as model systems for ideal thermoelectrics SR III		
		D3 Leadership skills (group B) Rob Thompson SR I	D3 Leadership skills (group B) Rob Thompson SR I	D3 Leadership skills (group B)  Rob Thompson SR I	D3 Leadership skills (group B) Rob Thompson SR I		
		D4 Presentation skills (group B)  Elena Kaufman  SR V	D4 Presentation skills (group B)  Elena Kaufman  SR IV	D4 Presentation skills (group B)  Elena Kaufman  SR IV	D4 Presentation skills (group B) Elena Kaufman SR V		
	17:30 – 18:00	Coffee break					
Evening sessions	18:00 – 20:00	Scientific colloquium and welcome reception  Addy Pross What is life? How physics enables chemistry to become biology SR I-III	Industry talk and reception  Guillermo Jenaro Rabadan  Flight physics at Airbus Operations  GmbH  SR I-III	Poster session  CFEL foyer  BBQ  19:00 Uhr  CFEL foyer			



