



**ERASMUS INTENSIVE PROGRAMME 2012**

“Applications of Electronics in Plasma Physics”

**Lecture Programme**



	Monday 16 July	Tuesday 17 July	Wednesday 18 July	Thursday 19 July	Friday 20 July
09:00 – 11:00	<b>The HiPER project</b> <b>John Collier</b>	<b>Waves and Instabilities in Plasmas</b> <b>Dimitrios Pliakis</b>	<b>Principles of Shock Ignition</b> <b>John Pasley</b>	<b>Warm dense matter studies</b> <b>Dimitri Batani</b>	<b>Laboratory Astrophysics</b> <b>Gianluca Sarri</b>
11:15 – 13:15	<b>Introduction to Laser Plasma Physics</b> <b>Michael Tatarakis</b>	<b>Laser Physics Fundamentals II</b> <b>Costantinos Petridis</b>	<b>Fast electron transport in laser matter interactions</b> <b>Luca Volpe</b>	<b>Secondary Sources generated from Ultrashort Laser Pulses and Applications</b> <b>Nektarios Papadogiannis</b>	<b>Interaction of ultrashort and intense laser pulses with atoms and molecules</b> <b>Faucher Olivier</b>
13:15 – 14:30	<b>Break</b>	<b>Break</b>	<b>Break</b>	<b>Break</b>	<b>Break</b>
14:30 – 16:30	<b>Laser Physics Fundamentals I</b> <b>Costantinos Petridis</b>	<b>Indirect drive ICF Physics</b> <b>John Pasley</b>	<b>Radiation Shielding Simulations for the HiPER Fundamental Science Target Area</b> <b>Eugene Clark</b>	<b>Weibel instability in density gradients</b> <b>Mark Dieckmann</b>	<b>High Harmonic Generation from Relativistically Oscillating Plasmas</b> <b>Brendan Dromey</b>
16:30 – 18:30	<b>Self Learning Session</b>	<b>Self Learning Session</b>	<b>Self Learning Session</b>	<b>Self Learning Session</b>	<b>Self Learning Session</b>

	Monday 23 July	Tuesday 24 July	Wednesday 25 July	Thursday 26 July	Friday 27 July
09:00 – 11:00		<b>Ion acceleration by intense laser pulses</b> <b>Jiri Limpouch</b>	<b>Non-linear wavepacket modulation in plasmas</b> <b>Ioannis Kourakis</b>	<b>Electron acceleration by intense laser pulses</b> <b>Zulficar Najmudin</b>	<b>Exams</b>
11:15 – 13:15	<b>Numerical simulation methods for laser-target interactions</b> <b>Jiri Limpouch</b>	<b>The Physics of ICF I</b> <b>Vladimir Tikhonchuk</b>	<b>Fusion Materials</b> <b>Raquel Gonzalez</b>	<b>The Physics of ICF II</b> <b>Vladimir Tikhonchuk</b>	<b>Exams</b>
13:15 – 14:30	<b>Break</b>	<b>Break</b>	<b>Break</b>	<b>Break</b>	<b>Break</b>
14:30 – 16:30	<b>Solitons in Plasmas</b> <b>Ioannis Kourakis</b>	<b>Self navigation of laser drivers on injected IFE pellets using SBS PCM</b> <b>Milan Kalal</b>	<b>Reactor Technologies</b> <b>Antonio Rivera</b>	<b>The use of a burning plasma for fundamental physics studies</b> <b>Steven Rose</b>	<b>Exams</b>
16:30 – 18:30	<b>Self Learning Session</b>	<b>Self Learning Session</b>	<b>Self Learning Session</b>	<b>Self Learning Session</b>	<b>Farewell Dinner</b>