

# HSC10: HERCULES Specialised Courses: Synchrotron Radiation Techniques contribution to Nanoscience (4-bunch period)

	Monday 18/05/2009	Tuesday 19/05/2009	Wednesday 20/05/2009	Thursday 21/05/2009	Friday 22/05/2009	
08:00	Registration (ILL) <u>8h00 - 8h30</u>		ESRF Safety Training 8h00 - 9h00			08:00
8:30	Welcome by José BARUCHEL <u>8h30 - 9h00</u>	Cristian Mocuta scanning mXRD imaging - <u>8h30 - 9h00</u>		Practicals - 8h30-12h30		8:30
9:00	Alain Fontaine Nanoscience/ an Introduction <u>9h00 - 10h30</u>	Michael FARLE Understanding Nanomagnetism from basic principles of magnetism: a tutorial introduction <u>9h00- 10h30</u>	Practicals - 9h00 - 13h00	ID01 CDI (group 4) T.H. Metzger	Julian Stangl Example of nanoscience with x-rays From ensemble average to single object properties <u>9h00 - 10h00</u>	9:00
9:30			ID08 (group 1) J. Vogel	ID22 (XANES & fluo) (group 3) J.A. Sans Tresserras		9:30
10:00			ID01 CDI (group 2) T.H. Metzger	ID13 scan n-diff. (group 1) M. Burghammer	Richard Ortega Cells <u>10h00 - 10h45</u>	10:00
10:30			COFFEE/ TEA	COFFEE/ TEA	BM29 (XAS) (group 3) M. Vaccari	COFFEE/ TEA
11:00	Christian David X-ray Optics, coherence, phase contrast <u>11h00 - 12h30</u>	Mark Newton Oxydation, catalysis, nanoparticles <u>11h00 - 12h30</u>	ID13 scan n-diff. (group 4) M. Burghammer	BM29 (XAS) (group 2) M. Vaccari	Olivier Tillement <u>11h15 - 11h45</u> Nano-particles for biomedical purposes	11:00
11:30						11:30
12:00						Jean-Michel GERARD Semiconductor nanostructures for photonics <u>11h45 - 12h30</u>
12:30						12:30
13:00	LUNCH 12h30 - 14h00	LUNCH 12h30 - 14h00	LUNCH 13h00 - 14h00	LUNCH 12h30 - 14h00	LUNCH 12h30 - 14h00	13:00
13:30						13:30
14:00	Laszlo Vincze Fluorescence techniques applied for nanoscience <u>14h00 - 15h00</u>	Jan Vogel Nano-Magnetism II/ PEEM <u>14h00 - 15h30</u>	Practicals - 14h00-18h00	Practicals - 14h00-18h00	Thomas Cornelius Nano indentation <u>14h00 - 14h45</u>	14:00
14:30			ID08 (group 2) J. Vogel	ID01 CDI (group 3) T.H. Metzger	Henri Mariette <u>14h45-15h30</u> Talking to a single spin with the language of nanoelectronics	14:30
15:00	Carlo Lamberti Applications in nano-electronics <u>15h00 - 16h00</u>	COFFEE/ TEA	ID01 CDI (group 1) T.H. Metzger	ID22 (XANES & fluo) (group 4) J.A. Sans Tresserras		COFFEE/ TEA
15:30		Cristian Mocuta Introduction in data evaluation from 2D reciprocal space maps to 3D data vizualisation in Q space (in front of the screen) <u>16h00 - 18h00</u>	BM29 (XAS) (group 4) M. Vaccari	ID13 scan n-diff. (group 2) M. Burghammer	Alexandre Simionovici Earth and planetary sciences <u>16h00- 16h45</u>	15:30
16:00	COFFEE/ TEA		ID13 scan n-diff. (group 3) M. Burghammer	BM29 (XAS) (group 1) M. Vaccari	Marine Cotte Cultural heritage materials <u>16h45 - 17h30</u>	16:00
16:30	Armando Sole X-ray fluorescence analysis PyMca for spectrum evaluation, compositional quantification (in front of the screen) <u>16h30-18h30</u>				Questionnaire / discussion <u>17h30 - 18h00</u>	16:30
17:00			Wine and Cheese Poster Session ILL/EMBL liaison hall			Alain Fontaine <u>18h00 - 18h30</u> Conclusion
17:30					Farewell cocktail ILL entrance hall	17:30
18:00						18:00
18:30						18:30
19:00	DINNER ESRF/ILL canteen	DINNER ESRF/ILL canteen	DINNER ESRF/ILL canteen	DINNER L'EPICURIEN in Grenoble	DINNER ESRF/ILL canteen	19:00

**Lectures AND safety training will take place in the ILL auditorium - Tutorials will take place in the ESRF computing training room**