

HERCULES Specialized Courses: Synchrotron Radiation X-ray Imaging						(4-bunch period)
	Sunday 21/05/2006	Monday 22/05/2006	Tuesday 23/05/2006	Wednesday 24/05/2006	Thursday 25/05/2006	Friday 26/05/2006
09:00		Introduction to SR imaging (overview) (José BARUCHEL) sources microbeams imaging (contrast) interactions photon-matter techniques examples	Phase Contrast Imaging Coherent beams (Wolfgang LUDWIG) coherence partial coherence phase object image contrast phase retrieval holotomography	Practicals	Practicals	X-ray Microscopy (Chris JACOBSEN) "Hard" X-rays microscopy Scanning/full field coherent diffraction imaging combination of techniques examples
				Tomography ID19 or BM05 Group [1]	Tomography ID19 or BM05 Group [3]	
				Topography BM05 or ID19 Group [2]	Topography BM05 or ID19 Group [4]	
10:30		COFFEE/ TEA	COFFEE/ TEA			COFFEE/ TEA
11:00		Absorption Imaging (Françoise PEYRIN) photoelectric + Compton radiography use of absorption edges 3D images: microtomography	Diffraction Imaging (X-ray topography) (José BARUCHEL) Principle Techniques Perfect crystal Contrast mechanisms applications	Medical ID17 Group [3]	Medical ID17 Group [1]	Imaging and spectroscopy Soft X-rays (Maya KISKINOVA) the specificity of soft X-rays spectromicroscopy PEEM, LEEM applications
				Microbeam ID21or ID22 Group [4]	Microbeam ID21or ID22 Group [2]	
12:30		LUNCH	LUNCH	LUNCH	LUNCH	LUNCH
14:00		Microbeam-based Imaging (Jean SUSINI) Lenses/Optics for microfocussing Interactions: fluorescence absorption diffraction Techniques	Medical Imaging/therapy (Hélène ELLEAUME) SR medical imaging dose problems use for diagnostic radiotherapy	Practicals	Practicals	Image Processing / Analysis (Lecture) (Chris JACOBSEN) Spectrum and image data analysis methods in X-ray microscopy
				Tomography ID19 or BM05 Group [4]	Tomography ID19 or BM05 Group [2]	
				Topography BM05 or ID19 Group [1]	Topography BM05 or ID19 Group [3]	
15:30		COFFEE/ TEA	COFFEE/ TEA			COFFEE/ TEA
16:00		3D image reconstruction and processing <i>Tutorial</i> (Elodie BOLLER) use of computer programs (in front of the screen)	Selected Applications: from materials science to nano-sciences and biology (Tilo BAUMBACH)	Medical ID17 Group [2]	Medical ID17 Group [4]	Image Processing / Analysis (Tutorial) (Chris JACOBSEN) Spectrum and image data analysis methods in X-ray microscopy
				Microbeam ID21or ID22 Group [3]	Microbeam ID21or ID22 Group [1]	
17:30	Registration		Wine and Cheese POSTERS			Conclusion
18:00						
	BUFFET	DINNER		DINNER	BANQUET	DINNER