

PROGRAM OF THE THEORETICAL COURSE (October 3-7 2022)

Monday	Tuesday	Wednesday	Thursday	Friday
008:3 REGISTRATION	09:00 Electron-Matter Interaction <i>R. Balboni</i>	09:30 Theory of Electron Diffraction 1 <i>A. Parisini</i>	09:30 High Resolution Electron Microscopy 1 <i>A. Parisini</i>	09:00 Electron Holography and Interferometric Methods <i>L. Ortolani</i>
09:15 OPENING				
09:30 Early stage evolution of electron microscopy instruments. <i>M. Vittori Antisari</i>	10:00 Radiation damage <i>R. Mazzaro</i>	11:00 COFFEE BREAK	11:00 COFFEE BREAK	11:00 COFFEE BREAK_
10:30 COFFEE BREAK	11:00 COFFEE BREAK	11:30 Theory of Electron Diffraction 2 <i>A. Parisini</i>	11:30 High Resolution Electron Microscopy 2 <i>A. Parisini</i>	11:30 Simulations in electron microscopy: image and diffraction <i>V. Grillo</i>
11:00 Instrumentation and Detectors <i>R. Ciancio</i>	11:30 Electron diffraction 1 <i>R. Balboni</i>	13:00 LUNCH	13:00 LUNCH	13:00 LUNCH
12:30 Electron Sources <i>V. Morandi</i>	13:00 LUNCH	14:30 X-ray Microanalysis of Thin Films <i>G. Bertoni</i>	14:30 Scanning Transmission Electron Microscopy 1 <i>V. Morandi</i>	14:00 Cryomicroscopy To be defined
13:30 LUNCH	14:30 Electron diffraction 2 <i>R. Balboni</i>	16:00 COFFEE BREAK	16:00 COFFEE BREAK	15:00 Company presentation To be defined
15:00 Electron Optics <i>M. Ferroni</i>	16:00 COFFEE BREAK	16:30 Electron Energy Loss Spectroscopy <i>G. Bertoni</i>	16:30 Scanning Transmission Electron Microscopy 2 <i>V. Morandi</i>	16:00 Company presentation To be defined
16:30 COFFEE BREAK	16:30 A Diffraction experiment: the Arago-Poisson spot <i>A. Parisini</i>	18:00	18:00	16:30 Company presentation To be defined
17:00 Introduction to Aberrations Correction <i>L. Ortolani</i>	17:30			17:00 Final Discussion and Closing Remarks
18:00				17:30

PROGRAM OF THE PRACTICAL COURSE (October 10-14 2022)

Monday

	Group A	Group B
13:00	REGISTRATION	
14:00	☉ Introduction to TEM M. Ferroni	Introduction to electron diffraction R. Balboni
15:30	COFFEE BREAK	
16:00	Introduction to electron diffraction R. Balboni	☉ Introduction to TEM M. Ferroni
17:30		

Tuesday

	Group A	Group B
09:00	☉ Electron diffraction R. Balboni	Diffraction pattern indexing Migliori/Gradone
10:30	COFFEE BREAK	
11:00	☉ Electron diffraction R. Balboni	Introduction to HREM A. Parisini
12:30	LUNCH	
14:00	Diffraction pattern indexing Migliori/Gradone	☉ Electron diffraction R. Balboni
15:30	COFFEE BREAK	
16:00	Introduction to HREM A. Parisini	☉ Electron diffraction R. Balboni
17:30		

Wednesday

	Group A	Group B
09:00	☉ HREM A. Parisini	HREM simulations V. Grillo
10:30	COFFEE BREAK	
11:00	☉ HREM A. Parisini	Image processing L. Ortolani
12:30	LUNCH	
14:00	HREM simulations V. Grillo	☉ HREM A. Parisini
15:30	COFFEE BREAK	
16:00	Image processing L. Ortolani	☉ HREM A. Parisini
17:30		

☉ Hands-on TEM sessions

PROGRAM OF THE PRACTICAL COURSE (October 10-14 2022)

Thursday

	Group A	Group B
09:00	☉ STEM V. Morandi	TEM sample preparation M. Ferroni
10:30	COFFEE BREAK	
11:00	☉ STEM V. Morandi	FIB sample preparation L. Ortolani
12:30	LUNCH	
14:00	TEM sample preparation M. Ferroni	☉ STEM V. Morandi
15:30	COFFEE BREAK	
16:00	FIB sample preparation L. Ortolani	☉ STEM V. Morandi
17:30		

Friday

	Group A	Group B
09:00	☉ EDS spectra acquisition A. Parisini	EDS spectra processing Migliori/Balboni
10:30	COFFEE BREAK	
11:00	EDS spectra processing Migliori/Balboni	☉ EDS spectra acquisition A. Parisini
12:30	LUNCH	
14:00	CLOSING OF THE SCHOOL	
15:30		

☉ Hands-on TEM sessions