



# X-Ray and Neutron Science

## 9<sup>th</sup> ESRF/ILL International Student Summer Programme

3<sup>th</sup> – 29<sup>th</sup> September 2023



### Sunday, 3<sup>rd</sup> September – Arrival on site

18:00 – 21:00	Welcome reception & get together at the “Chalet”	Students, tutors, organisers
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### Monday, 4<sup>th</sup> September – Oral Sessions – ESRF Visitor Center & Auditorium

08:30 – 09:45	Administrative Formalities	ESRF students 8:30 ESRF room 421 ILL students: 8:30 Chadwick Amphitheatre
	<b>ESRF Visitor Center</b>	
10:00 – 11:00	<b>Welcome address and presentation of the ESRF</b>	Francesco Sette (ESRF Director General)
11:00	Coffee break	
11:15 – 12:15	<b>Welcome address and presentation of the ILL</b>	Jacques Jestin (Dir. Science Div. ILL)
12:15 – 13:30	Lunch break (common restaurant on site)	
	<b>ESRF Auditorium</b>	
13:30 – 14:30	<b>X-rays and their Interaction with Matter (part 1)</b>	Luigi Paolasini (ESRF)
14:30	Coffee break	
14:45 – 15:30	<b>X-rays and their Interaction with Matter (part 2)</b>	Luigi Paolasini (ESRF)
15:30 – 17:00	Safety training for ESRF students (room BEL 1-01)	

### Tuesday, 5<sup>th</sup> September – Oral Sessions – ESRF Auditorium

08:30 – 09:30	<b>Neutrons Production</b>	Ulli Köster (ILL)
09:30	Coffee break	
10:00 – 11:00	<b>Neutron Instrumentation</b>	Eddy Lelièvre-Berna (ILL)
	Lunch break	
14:00 – 15:00	<b>Principles of Synchrotron Radiation</b>	Nicola Carmignani (ESRF)
15:00	Coffee break	
15:30 – 16:30	<b>X-ray Instrumentation</b>	Raymond Barrett (ESRF)

### Wednesday, 6<sup>th</sup> September – Oral Sessions – ESRF Auditorium

09:00 – 10:00	<b>Neutrons and their Interaction with Matter (part 1)</b>	Mark Johnson (ILL)
10:00	Coffee break	
10:30 – 11:30	<b>Neutrons and their Interaction with Matter (part 2)</b>	Mark Johnson (ILL)
	Lunch break	
	<b>Visit of facilities</b>	
13:30– 15:00	Meeting point: in front of canteen <b>Visit of ESRF (group 1) – Visit of ILL (group 2)</b>	Yannick Lacaze ESRF, Paul Steffens ILL
15:00	Coffee break	
15:30 – 17:00	Meeting point: in ESRF entrance hall <b>Visit of ESRF (group 2) – Visit of ILL (group 1)</b>	Yannick Lacaze ESRF, Paul Steffens ILL

### Thursday, 7<sup>th</sup> September

8:30	Safety-training ILL students	ILL4 Seminar Room (1st floor)
Rest of the day	Laboratory Work	

Friday, 8th September – Laboratory work (project)

Monday, 11<sup>th</sup> September – Oral morning session – ESRF Auditorium

09:00 – 10:00	<b>Neutron Diffraction</b>	Juan Rodriguez-Carvajal (ILL)
10:00	<i>Coffee break</i>	
10:30 – 11:30	<b>Neutron Spectroscopy</b>	Andrew Wildes (ILL)
<i>Afternoon</i>	Laboratory work (project)	

Tuesday, 12<sup>th</sup> September – Laboratory work (project)

Wednesday, 13<sup>th</sup> September – Oral morning session – ESRF Auditorium

09:00 – 10:00	<b>X-ray Diffraction</b>	Tobias Schulli (ESRF)
10:00	<i>Coffee break</i>	
10:30 – 11:30	<b>Magnetic and lattice excitations characterized with neutron scattering</b>	Mechthild Enderle (ILL)
<i>Afternoon</i>	Laboratory work (project)	

Thursday, 14<sup>th</sup> September – Laboratory work (project)

Friday, 15<sup>th</sup> September – Laboratory work (project)

Monday, 18<sup>th</sup> September – Oral morning session – ESRF Auditorium

09:00 – 10:00	<b>X-ray Coherence</b>	Vincent Favre-Nicolin (ESRF)
10:00	<i>Coffee break</i>	
10:30 – 11:30	<b>Synchrotron radiation and Structural Biology</b>	Montserrat Soler-Lopez (ESRF)
<i>Afternoon</i>	Laboratory work (project)	

Tuesday, 19<sup>th</sup> September – Laboratory work (project)

Wednesday, 20<sup>th</sup> September – Oral morning session – ESRF Auditorium

09:00 – 10:00	<b>X-ray Imaging</b>	Peter Cloetens (ESRF)
10:00	<i>Coffee break</i>	
10:30 – 11:30	<b>X-ray Studies under Extreme Conditions</b>	Mohamed Mezouar (ESRF)
<i>Afternoon</i>	Laboratory work (project)	

Thursday, 21<sup>st</sup> September – Oral morning session – ESRF Auditorium

09:00 – 10:00	<b>Soft Matter Studies with X-rays</b>	Narayanan Theyencheri (ESRF)
10:00	<i>Coffee break</i>	
10:30 – 11:30	<b>Soft Matter Studies with Neutrons</b>	Leonardo Chiappisi (ILL)
<i>Afternoon</i>	Laboratory work (project)	

Friday, 22<sup>nd</sup> September – Laboratory work (project)

**Monday, 25<sup>th</sup> September – Laboratory work (project)**

**Tuesday, 26<sup>th</sup> September – Oral morning session – Room MD1-21**

09:00 – 10:00	<b>Magnetism and X-ray Dichroism</b>	Andrei Rogalev (ESRF)
10:00	<i>Coffee break</i>	
10:30 – 11:30	<b>Nuclear &amp; Particle Physics</b>	Oliver Zimmer (ILL)
<i>Afternoon</i>	Laboratory work (project)	

**Wednesday, 27<sup>th</sup> September – Laboratory work (project)**

**Thursday, 28<sup>th</sup> September – Students' Workshop – ESRF Auditorium**

Session 1: chair		
13:45 – 14:00	Welcome + Introduction	Patrick Bruno, ESRF
14:00 – 17:00	Presentations part 1	
Session 2: chair		
16:00 – 17:00	Presentations part 2	

**Friday, 29<sup>th</sup> September – Students' Workshop – ESRF Auditorium**

Session 3: chair		
09:00 – 10:00	Presentations part 3	
Session 4: chair		
10:30 – 12:00	Presentations part 4	
12:00 – 12:15	Closing remarks	Paul Steffens (ILL)
20:00	<i>Farewell dinner in town</i>	