



PROGRAMME

18 October 2021:

10:00 to 12:00	Arrival, registration
12:00 to 13:30	Lunch break (buffet)
13:30 to 13:40	<i>Welcome, Jacques Jestin</i>
13:40 to 14:00	<i>Scope of i2ns, Martin Boehm</i>
14:00 to 16:00	New algorithms and Machine learning: relevance to inelastic neutron scattering (Chair: Toby Perring)
	Introduction: Chair (10')
14:10 to 14:30	<i>ML assisted data interpretation, Keith Butler</i>
14:30 to 14:50	Discussion
14:50 to 15:10	<i>AI tools that Auto-generate Materials Database for building Data-science platforms, Jacqueline Cole</i>
15:10 to 15:20	
15:20 to 15:40	Discussion
	<i>Domain-Aware Gaussian Process and High-Performance Mathematical Optimization for Optimal and Autonomous Data Acquisition,</i>
15:40 to 16:00	Marcus Noack
	Discussion
16:00 to 16:30	Coffee break
16:30 to 19:10	Experimental life – how to perform experiments in future (Chair: Astrid Schneidewind)
	Introduction: Chair (10')
16:40 to 16:55	<i>Costs of instrument paths – AI vs. analytical approach?, Tobias Weber</i>
16:55 to 17:10	Discussion
17:10 to 17:30	<i>Successful experiments - criteria for algorithms, Mario Teixeira Parente</i>
17:30 to 17:50	Discussion
17:50 to 18:10	<i>The need for realistic simulations of phonon intensities in inelastic neutron and x-ray scattering – an experimentalist’s perspective, Frank Weber</i>
18:10 to 18:30	Discussion
18:30 to 18:50	<i>Digital twins and virtual experiments. Gain and opportunities, Georg Brandl</i>
18:50 to 19:10	Discussion
19:30 to 21:00	Dinner

19 October 2021:

7:00 to 8:15	Breakfast
8:30 to 10:05	New trends in instrumentation (Chair: Henrik Ronnow) <i>Introduction: Chair (5')</i>
8:35 to 9:20	<i>Instrumentation trends for multiplexing continuous-beam spectrometers (30'+15')</i> , Kim Lefmann
9:20 to 10:05	<i>The past, present and future TOF spectroscopy (30'+15')</i> , Robert Bewley
10:05 to 10:30	Coffee break
10:30 to 12:45	Providing the right experimental conditions - for real (Chair: Arno Hiess)
10:30 to 10:35	Introduction, Chair (5')
10:35 to 11:00	<i>Beyond the basics – Complex sample environment for neutron spectroscopy (18'+7')</i> , Marek Bartkowiak
11:00 to 11:25	<i>High magnetic fields using High Temperature Superconductors (18'+7')</i> , Arnaud Badel
11:25 to 11:50	<i>Wide angle polarization analysis (18'+7')</i> , Mechthild Enderle
11:50 to 12:15	<i>Stroboscopic polarized measurements to study the domain dynamics in multiferroics, Markus Braden</i>
12:15 to 12:45	<i>Discussion and way forward (30')</i> , Arno Hiess
12:45 to 14:00	Lunch break
14:00 to 17:00	Science cases (Chair: Philippe Bourges) Introduction, Chair (5')
14:05 to 14:35	<i>Dynamical Signatures of Kitaev Magnetism (20'+10')</i> , J. Knolle
14:35 to 15:05	<i>Pyrochlore magnets, spin ice and quantum spin ice physics: the neutron perspective (20'+10')</i> , Sylvain Petit
15:05 to 15:35	<i>Exploring the Shastry-Sutherland compound, Sr₂Cu(BO₃)₂, by using inelastic neutron scattering with high pressures and high magnetic fields (20'+10')</i> , Ellen Fogh
15:35 to 16:00	Coffee break
16:00 to 16:30	<i>Quantum Critical Phenomena in Metals with Competing Interactions, (20'+10')</i> , Daniel Mazzone
16:30 to 17:00	<i>Spin-orbital excitations in d-transition metal ion compounds (20'+10')</i> , Chris Stock
17:30 to 19:00	Poster session
19:00 to 21:00	Wine and cheese (and beer)

20 October 2021:

7:00 to 8:15	Breakfast
8:30 to 10:00	Science cases (Chair: Andrew Wildes)
8:30 to 9:00	<i>Time-of-flight spectroscopy on polycrystalline frustrated magnets (20'+10')</i> , John Ross Stewart
9:00 to 9:30	<i>Quantum bits and entanglement: a neutron scattering view (20'+10')</i> , Tatiana Guidi
9:30 to 10:00	<i>Probing electronic correlations with neutron spectroscopy (20'+10')</i> , Marc Janoschek
10:00 to 10:30	Coffee break
10:30 to 11:00	<i>Phonons in hybrid perovskites(20'+10')</i> , Philippe Bourges
11:00 to 11:30	<i>Lattice dynamics and diffusion in functional materials (20'+10')</i> , David Voneshen
11:30 to 12:00	<i>Conclusions</i>
12:30	Lunch break and departure