## Summerschool on Condensed Matter Research, Zuoz, 17. August 2013 – 23. August 2013 Materials – Structure and Magnetism

	Sunday 18 Aug 2013	Monday 19 Aug 2013	Tuesday 20 Aug 2013	Wednesday 21 Aug 2013	Thursday 22 Aug 2013	Friday 23 Aug 2013
09:00 - 10:15	Introduction to Magnetism Andrew Boothroyd	Frustration – structure of material and symmetry of interactions	Introduction to Superconductivity – pairing mech, flux lines	Excursion	Imaging magnetic domains. (neutrons and photons) and domain dynamics	Skyrmions Sebastian Mühlbauer
		Leon Balents	Hans Henning Klauss		Carlos Fernandes Vaz	
10:15 – 10:45	COFFEE	COFFEE	COFFEE		COFFEE	COFFEE
10:45 – 12:00	Introduction to materials structure and properties	Ferroelectrics – materials and interactions	Introduction to the Muon-Spin Rotation/Relaxation Technique – Using μSR to		Proposed Ultrafast Structural and Magnetic Studies of Condensed Matter with the	ESS – new opportunities Colin Carlile
	Bertram Batlogg	Dennis Meier	Study Magnetism and Superconductivity		SwissFEL X-Ray Laser	
			Alex Amato		Bruce Patterson	
12:15 – 16:00	Lunch and Free Afternoon	Lunch and Free Afternoon	Lunch and Free Afternoon		Lunch and Free Afternoon	Closing remarks Lunch Departure
16.00 - 16.30	COFFEE	COFFEE	COFFEE	COFFEE	COFFEE	
16:30 – 17:45	Introduction to diffraction (neutrons and photons)	Spectroscopy neut. Magnetic excitations	Depth dependent investigations of thin films and heterostructures with	Interfaces and heterostructures	Novel routes to manipulate magnetic and crystal structures	
	Denis Sheptyakov	Bella Lake	polarized low energy muons	Phil Willmott	Urs Staub	
			Elvezio Morenzoni			
17:45 – 19:00	Magnetic structure determination (neutrons and	Spectroscopy fotons RiXS	Electronic structure – Arpes	Magnetism at interfaces	Poster Session	
	photons) Jonathan White	Thorsten Schmitt	Hugo Dil	Pietro Gambardella		
19:15 – 20:30	DINNER	DINNER	DINNER	DINNER	Apéro	
20:30 - 21:30	Predicting magnetic structures	Multiferroics	Magnetic semiconductors	Topological insulaters	BANQUET	
	Ole Krogh Andersen	Thom Palstra	Tomas Jungwirth	Jürg Osterwalder		