Program for the 2024 CAS - Introduction to Accelerator Physics

	Sun 22/09	Mon 23/09	Tue 24/09	Wed 25/09	Thu 26/09	Fri 27/09	Sat 28/09	Sun 29/09	Mon 30/09	Tue 01/10	Wed 02/10	Thu 03/10	Fri 04/10	Sat 05/10
08:30	Arrival day and registration	Opening / ALBA presentation	Transverse Linear Beam Dynamics II	Transverse Linear Beam Dynamics III	ALBA visit	Linear Imperfections - corrections	Electron Beam Dynamics II	Excursion	Cyclotrons	Beam Diagnostics I	Free	Time and Frequency domain signals I	Synchrotron light circular machines & FELs I	Departure day
09:30														
09:35		Electromagnetic Theory	Warm Magnets	Linear Accelerators I		Longitudinal BD in Circular Machines II	Collective Effects III		RF systems I	Introduction to Non-Linear longitudinal Beam Dymanics		A first taste of Non-Linear Beam Dynamics I	Synchrotron light circular machines & FELs II	
10:35		Coffee				Coffee			Coffee			Coffee		
11:05		History of particle acceleration	Sources	Transverse Linear Beam Dynamics IV		Collective Effects I	Injection and Extraction		Sustainability for Accelerators	Beam Diagnostics II		Time and Frequency domain signals II	Particle motion in Hamiltonian Formalism II	
12:05		Lunch							Lunch					
13:45		Kinematics of Particle Beams - Relativity	Secondary beams and targets	Linear Accelerators II	Transverse Linear Beam Dynamics VI	Electron Beam Dynamics I	Collective Effects IV		RF systems II	Advanced accelerator concepts I	Computational tools I	A first taste of Non-Linear Beam Dynamics II	Putting it all together	
14:45														
14:50		Transverse Linear Beam Dynamics I	Superconducting Magnets	Transverse Linear Beam Dynamics V	Linear Imperfections I	Collective Effects II	Vacuum		Hands-ON calculations (longitudinal) - Intro	Hands-ON calculations (longitudinal) - III	Advanced accelerator concepts II	Particle motion in Hamiltonian Formalism I	Designing a synchrotron - a real life example	
15:50		Coffee							Coffee					
16:20		Accelerator Applications	Hands-ON Lattice calulations I	Hands-ON Lattice calulations III	Longitudinal BD in Circular Machines I	Hands-ON Lattice calulations V	Discussion session		Hands-ON calculations (longitudinal) - I	Hands-ON calculations (longitudinal) - IV	Computational tools II	Discussion session	Closing	
17:20														
17:25		1 slide 1 minute	Hands-ON Lattice calulations II	Hands-ON Lattice calulations IV	Linear Imperfections II	Hands-ON Lattice calulations VI	Study time all		Hands-ON calculations (longitudinal) - II	Hands-ON calculations (longitudinal) - V	Colliders and luminosity	Study time all		
18:45		Welcome reception	Poster session		Discussion session	** Seminar **								
20:15	Dinner at Hotel												Banquet	
21:00										Cinema event				

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