Program for the 2024 CAS - Introduction to Accelerator Physics

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