

Program for the 2022 CAS - Introduction to Accelerator Physics																		
	Sun 18/09	Mon 19/09	Tue 20/09	Wed 21/09	Thu 22/09	Fri 23/09	Sat 24/09	Sun 25/09	Mon 26/09	Tue 27/09	Wed 28/09	Thu 29/09	Fri 30/09	Sat 01/10				
08:30	Arrival day and registration	Opening	Kinematics of Particle Beams - Relativity	Transverse Linear Beam Dynamics V	Free	Beam Instrumentation	Electron Beam Dynamics I	Excursion	Cyclotrons I	Vacuum	Free	A first taste of Non-Linear Beam Dynamics I	Advanced accelerator concepts II	Departure day				
09:30																		
09:45		Electromagnetic Theory I	Transverse Linear Beam Dynamics III	Longitudinal BD in Circular Machines I		Computational tools II	Electron Beam Dynamics II		RF systems I	Collective Effects I		Injection and Extraction	Particle motion in Hamiltonian Formalism II					
10:45		Coffee				Coffee			Coffee			Coffee						
11:15		Electromagnetic Theory II	Linear Accelerators I	Linear Imperfections I		Beam Diagnostics	Discussion electron beam dynamics		Cyclotrons II/FFAs	Introduction to Non-Linear longitudinal Beam Dyanmics		A first taste of Non-Linear Beam Dynamics II	Synchrotron light circular machines					
12:15		Lunch							Lunch									
13:45		Transverse Linear Beam Dynamics I	Superconducting Magnets	Longitudinal BD in Circular Machines II	History of particle acceleration	Sources	Machine & People Protection Issues		RF systems II	Collective Effects II	Collective Effects III	Advanced accelerator concepts I	FELs					
14:45																		
15:00		Warm Magnets	Linear Accelerators II	Time and Frequency domain signals I	Time and Frequency domain signals II	Linear Imperfections - corrections	Secondary beams and targets		Hands-ON calculations (longitudinal) - Intro	Hands-ON calculations (longitudinal) - III	Colliders and luminosity	Particle motion in Hamiltonian Formalism I	Designing a synchrotron - a real life example					
16:00		Coffee							Coffee									
16:30		Transverse Linear Beam Dynamics II	Transverse Linear Beam Dynamics IV	Hands-ON Lattice calulations I	Accelerator Applications	Hands-ON Lattice calulations III	Hands-ON Lattice calulations V		Hands-ON calculations (longitudinal) - I	Hands-ON calculations (longitudinal) - IV	Collective Effects IV	Q&A/study time	Closing					
17:30		1 slide 1 minute	Computational tools I	Hands-ON Lattice calulations II	Linear Imperfections II	Hands-ON Lattice calulations IV	Hands-ON Lattice calulations VI		Hands-ON calculations (longitudinal) - II	Hands-ON calculations (longitudinal) - V	Discussion collective effects							
17:45																		
18:45		Welcome reception				Discussion session					Poster session ** Seminar ** tbd							
20:00	Dinner at Hotel												Banquet					
21:00										Cinema event								