

Program for the 2020 CAS - Introduction to Accelerator Physics - Chavannes-de-Bogis Switzerland

	Sun 30.08	Mon 31.08	Tue 1.9.	Wed 2.9.	Thu 3.9.	Fri 4.9.	Sat 5.9.	Sun 6.9.	Mon 7.9.	Tue 8.9.	Wed 9.9.	Thu 10.9.	Fri 11.9.	Sat 12.9.			
8:30	Arrival day and registration	Opening Schmickler	Transverse Linear Beam Dynamics I	Longitudinal BD in Circular Machines II	Superconducting Magnets	Free	Collective Effects I	Excursion	Collective Effects III	Electron Beam Dynamics I	Free	Machine & People Protection Issues	Vacuum	Departure day			
9:30																	
9:45		Electromagnetic Theory I	Transverse Linear Beam Dynamics II	Transverse Linear Beam Dynamics III	Transverse Linear Beam Dynamics V		Collective Effects II		Collective Effects IV	Electron Beam Dynamics II		Cyclotrons I	A first taste of Non-Linear Beam Dynamics II				
10:45		Coffee							Coffee	Coffee		Coffee					
11:15		History of particle acceleration	Particle motion in Hamiltonian Formalism I	Warm Magnets / power converters	Time and Frequency domain signals I		Sources		Discussion collective effects	Discussion electron beam dynamics		A first taste of Non-Linear Beam Dynamics I	Synchrotron light circular machines				
12:15		Lunch							Lunch								
13:45		Electromagnetic Theory II	Particle motion in Hamiltonian Formalism II	Transverse Linear Beam Dynamics IV	Time and Frequency domain signals II		Linear Imperfections I		Linear Imperfections - corrections	RF systems I		RF systems II	Luminosity and Colliders		Cyclotrons II/FFAs	FELs	
14:45																	
15:00		Accelerator Applications	Linear Accelerators I	Injection and Extraction	Statistical Description of Particle Beams		Linear Imperfections II		Secondary beams and targets	Hands-ON calculations (longitudinal) - Intro Damerou et al.		Introduction to Non-Linear longitudinal Beam Dynamics	Beam Instrumentation		Beam Diagnostics	Designing a synchrotron - a real life example	
16:00		Coffee							Coffee								
16:30	Kinematics of Particle Beams - Relativity	Longitudinal BD in Circular Machines I	Hands-ON Lattice calculations - introduction	Advanced accelerator concepts	Hands-ON Lattice calculations III	Hands-ON Lattice calculations V	Hands-ON calculations (longitudinal) - I	Hands-ON calculations (longitudinal) - III	Q&A/study time I all	Q&A/study time II all	Closing Schmickler						
17:30	1 slide 1 minute	Linear Accelerators II	Hands-ON Lattice calculations I	Discussion session	Hands-ON Lattice calculations IV	Hands-ON Lattice calculations VI	Hands-ON calculations (longitudinal) - II	Hands-ON calculations (longitudinal) - IV	Poster session	** Seminar ** tbd							
18:30	Welcome reception		Hands-ON Lattice calculations II														
19:30	Dinner at Hotel											Banquet					
21:00										Cinema event							