

Program for the 2021 CAS - Introduction to Accelerator Physics

	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri					
	25/09	26/09	27/09	28/09	29/09	30/09	01/10	02/10	03/10	04/10	05/10	06/10	07/10	08/10					
8:30	Arrival day and registration	Opening Schmickler	Transverse Linear Beam Dynamics I Hillert	Longitudinal BD in Circular Machines II Tecker	Beam Instrumentation Forck	Excursion	Collective Effects I Li	Excursion	Collective Effects III Li	Electron Beam Dynamics I Rivkin	Excursion	Cyclotrons II/FFAs Seidel	Injection and Extraction Tecker	Departure day					
9:30																			
9:45		Electromagnetic Theory I Shreyber	Time and Frequency domain signals I Schmickler	Transverse Linear Beam Dynamics III Hillert	Transverse Linear Beam Dynamics V Hillert		Free		Collective Effects II Li	Collective Effects IV Li		Electron Beam Dynamics II Rivkin	Free		A first taste of Non-Linear Beam Dynamics I Bartosik	Particle motion in Hamiltonian Formalism II Papaphilippou			
10:45		Coffee	Coffee COVID test	Coffee			Coffee		Coffee	Coffee		Coffee COVID test	Coffee						
11:15		History of particle acceleration Sheehy	Transverse Linear Beam Dynamics II Hillert	Warm Magnets / power converters de Rijk	Beam Diagnostics Forck				Sources Knie	Discussion collective effects Li		Discussion electron beam dynamics Rivkin			Vacuum Seidel	Synchrotron light circular machines Prat			
12:15		Lunch					Lunch 13:15 COVID test		Lunch	Lunch									
13:45		Electromagnetic Theory II Shreyber	Linear Accelerators I Alesini	Transverse Linear Beam Dynamics IV Hillert	Advanced accelerator concepts I Ferrario		Machine & People Protection Issues Forck		Linear Imperfections - corrections Ziemann	RF systems I Damerou		RF systems II Damerou	Colliders and luminosity Schmickler		A first taste of Non-Linear Beam Dynamics II Bartosik	FELs Prat			
14:45																			
15:00		Accelerator Applications Sheehy	Time and Frequency domain signals II Schmickler	Superconducting Magnets de Rijk	Linear Imperfections I Ziemann		Linear Imperfections II Ziemann		Secondary beams and targets Knie	Hands-ON calculations (longitudinal) - Intro Damerou et al.		Introduction to Non-Linear longitudinal Beam Dynamics Damerou	Cyclotrons I Seidel		Particle motion in Hamiltonian Formalism I Papaphilippou	Designing a synchrotron - a real life example Papaphilippou			
16:00		Coffee																	
16:30		Kinematics of Particle Beams - Relativity Gianfelice	Longitudinal BD in Circular Machines I Tecker	Computational tools I Latina	Computational tools II Latina		Hands-ON Lattice calculations III Sterbini et al.		Hands-ON Lattice calculations V Sterbini et al.	Hands-ON calculations (longitudinal) - I Damerou et al.		Hands-ON calculations (longitudinal) - III Damerou et al.	Q&A/study time I all		Q&A/study time II all	Closing Schmickler			
17:30		1 slide 1 minute	Linear Accelerators II Alesini	Hands-ON Lattice calculations I Sterbini et al.	Advanced accelerator concepts II Ferrario		Hands-ON Lattice calculations IV Sterbini et al.		Hands-ON Lattice calculations VI Sterbini et al.	Hands-ON calculations (longitudinal) - II Damerou et al.		Hands-ON calculations (longitudinal) - IV Damerou et al.	Q&A/study time II all						
18:30		Welcome reception		Hands-ON Lattice calculations II Sterbini et al.	Discussion session							Hands-ON calculations (longitudinal) - V Damerou et al.	Poster session		** Seminar **				
19:30		Dinner at Hotel													Banquet				
21:00										Cinema event									