Program for the 2022 CAS - Introduction to Accelerator Physics

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