Program for the 2023 CAS - Introduction to Accelerator Physics

	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun
	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
08:30	Arrival day and registration	Opening Tecker et al.	Kinematics of Particle Beams - Relativity Shreyber	Transverse Linear Beam Dynamics IV Hillert	Free	Beam Instrumentation Forck	Electron Beam Dynamics I Rivkin	Excursion --- Bus will leave at 8:00 AM!!!	Cyclotrons Seidel	Vacuum Seidel	Free / ALBA visit Bus will leave at 8:00 AM!!!	A first taste of Non-Linear Beam Dynamics I Bartosik	Advanced accelerator concepts II Ferrario	Departure day
09:30														
09:45		Electromagnetic Theory I Shreyber	Warm Magnets de Rijk	Computational tools I Latina		Computational tools II Latina	Electron Beam Dynamics II Rivkin		RF systems I Damerau	Collective Effects I Li		Secondary beams and targets Knie	Particle motion in Hamiltonian Formalism II Papaphilippou	
10:45		Coffee				Coffee			Coffee			Coffee		
11:15		History of particle acceleration Sheehy	Transverse Linear Beam Dynamics II Hillert	Transverse Linear Beam Dynamics V Hillert		Beam Diagnostics Forck	Injection and Extraction Dutheil		Sustainability for Accelerators Seidel	Introduction to Non-Linear longitudinal Beam Dymanics Damerau		A first taste of Non-Linear Beam Dynamics II Bartosik	Synchrotron light circular machines & FELs I Prat	
12:15		Lunch							Lunch					
13:45		Electromagnetic Theory II Shreyber	Linear Accelerators I Alesini	Longitudinal BD in Circular Machines I Tecker	Longitudinal BD in Circular Machines II Tecker	Colliders and luminosity Schmickler	Machine & People Protection Issues Forck		RF systems II Damerau	Collective Effects II Li	Collective Effects III Li	Advanced accelerator concepts I Ferrario	Synchrotron light circular machines & FELs II Prat	
14:45														
15:00		Transverse Linear Beam Dynamics I Hillert	Transverse Linear Beam Dynamics III Hillert	Time and Frequency domain signals I Schmickler	Linear Imperfections I Ziemann	Linear Imperfections - corrections Ziemann	ALBA presentation Discussion session Biscari		Hands-ON calculations (longitudinal) - Intro Damerau et al.	Hands-ON calculations (longitudinal) - III Damerau et al.	Sources Knie	Particle motion in Hamiltonian Formalism I Papaphilippou	Designing a synchrotron - a real life example Papaphilippou	
16:00		Coffee							Coffee					
16:30		Accelerator Applications Sheehy	Linear Accelerators II Alesini	Hands-ON Lattice calulations I Gamba et al.	Time and Frequency domain signals II Schmickler	Hands-ON Lattice calulations III Gamba et al.	Hands-ON Lattice calulations V Gamba et al.		Hands-ON calculations (longitudinal) - I Damerau et al.	Hands-ON calculations (longitudinal) - IV Damerau et al.	Collective Effects IV Li	Study time	Closing Tecker	
17:30														
17:45		1 slide 1 minute	Superconducting Magnets de Rijk	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 Damerau et al.	Hands-ON calculations (longitudinal) - V Damerau et al.	Discussion session	all		
18:45		Welcome reception			Discussion session						Poster session	** Seminar ** Fusion for Energy Paco Sánchez		
20:00		Dinner at Hotel											Banquet	
21:00										Cinema event			Show	