

### Program for the 2024 CAS - Advanced Accelerator Physics

	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri				
	10/11	11/11	12/11	13/11	14/11	15/11	16/11	17/11	18/11	19/11	20/11	21/11	22/11				
08:30	Arrival day and registration	Opening	Lattice Cells	Recap Longitudinal Beam Dynamics I	Space charge in linear machines	Beam Instabilities - Transverse	Beam loading	Excursion	Optics calculations	Landau Damping I	Free	Non Linear Dynamics - Phenomenology I	Departure day				
		Tecker	Sterbini	Tecker	Ferrario	Li	Damerau		Sterbini	Buffat		Papaphilippou					
09:30		Recap Introductory course I	Accelerator issues overview	Recap Longitudinal Beam Dynamics II	Wakefields and Impedances	Instabilities in Linacs	Beam Dynamics with Synchrotron Radiation		High Brightness Beam Diagnostics	Muon Colliders I		Collimation					
		Schmickler	Tecker	Tecker	Rumolo	Ferrario	Martin		Bobb	Rogers		Redaelli					
10:30		Coffee							Coffee			Coffee					
11:00		Intro to RF measurement techniques I	Intro to RF measurement techniques II	RF Manipulations I	Space charge in circular machines	Electron Cloud and instabilities	Insertion devices - Radiation		FEL I	Landau Damping II		Non Linear Dynamics - Phenomenology II					
		Wendt	Wendt	Timko	Ferrario	Li	Clarke		Hillert	Buffat		Papaphilippou					
12:00		Intro to Beam Instrumentation and Diagnostics I	Intro to Beam Instrumentation and Diagnostics II	RF Manipulations II	Beam Instabilities - Longitudinal	Discussion on Instabilities	Low emittance lattices		Longitudinal beam diagnostics	Muon Colliders II		Discussion on Non Linear Dynamics					
		Krupa	Krupa	Timko	Rumolo	Rumolo/Li	Martin		Bobb	Rogers		Papaphilippou					
13:00		Lunch							Lunch								
14:30		Recap Introductory course II	Insertions & Dispersion Suppressors	RF Feedbacks	Free	Overview of Wakefield Acceleration	Insertion devices - Technology		FEL II	ERL		Non Linear Dynamics - Methods and Tools I		Collimation + technical implementation			
		Schmickler	Sterbini	Damerau		Ferrario	Clarke		Hillert	Jankowiak		Papaphilippou		Redaelli			
15:30		Intro to Optics Design	C1/C2/C3	C1/C2/C3		Coffee			Coffee			Beam-Beam effects		RF show			
16:00		Sterbini				Coffee			Coffee			Buffat					
16:30	Coffee							Coffee		Coffee							
17:00	1S1M	C1/C2/C3	C1/C2/C3	C1/C2/C3		C1/C2/C3	C1/C2/C3	C1/C2/C3	C1/C2/C3	Non Linear Dynamics - Methods and Tools II	Closing						
18:00										Papaphilippou	Tecker						
18:30	Welcome Drink									HL-LHC Challenges							
19:00			18:30 Seminar						Zerlauth								
19:30	Dinner									21:00 Cinema evening	Gala Dinner						