

**Programme for the 2019 CAS - Introduction to Accelerator Physics - High Tatras**

	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat				
	8.9	9.9	10.9	11.9	12.9	13.9	14.9	15.9	16.9	17.9	18.9	19.9	20.9	21.9				
8:30	Arrival day and registration	Opening	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				
		Local/Schmickler	Hillert	Tecker	de Rijk		Li		Li	Rivkin		Forck	Seidel					
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					
		Herr	Hillert	Hillert	Hillert		Li		Li	Rivkin		Seidel	Papaphilippou					
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					
		Lebrun	Sheehy	de Rijk	Schmickler		Faircloth		Li	Rivkin		Papaphilippou	Prat					
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		
	Herr	Sheehy	Hillert	Schmickler	Ziemann	Ziemann	Damerou	Damerou	Schmickler	Seidel	Prat							
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	Introduction to Non-Linear longitudinal Beam Dynamics	Beam Instrumentation	Beam Diagnostics	Designing a synchrotron - a real life example							
	Sheehy	Alesini	Tecker	Ferrario	Ziemann	Faircloth	Damerou et al.	Damerou	Forck	Forck	Papaphilippou							
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	Q&A/study time II	Closing							
	Herr	Tecker	Ziemann et al.	Ferrario	Ziemann et al.	Ziemann et al.	Damerou et al.	Damerou et al.	all	all	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**								
		Alesini	Ziemann et al.		Ziemann et al.	Ziemann et al.	Damerou et al.	Damerou et al.										
18:30	Welcome reception		Hands-ON Lattice calculations II															
			Ziemann et al.															
19:30	Dinner at Hotel											Banquet						
21:00									Cinema event									