

Programme for CAS course "Beam Instrumentation", 2-15 June 2018, Tuusula, Finland

	2.6.	3.6	4.6.	5.6.	6.6.	7.6.	8.6	9.6	10.6	11.6	12.6.	13.6.	14.6.	15.6		
08:30	Arrival day and registration	Opening	BD Requirements Overview/Measurement Principles III	Numerical methods, mathematical background I	Numerical methods, mathematical background II	Diagnostics Examples from CTF3	Bunch Length Diagnostics II	Excursion	Diagnostics Examples from light sources	BPM systems II	Free	Collective Effects & its diagnostics I	Timing and Synchronization II	Departure day		
		local speaker/ H.Schmickler	G. Kube	L. Nadolski	L. Nadolski	F.Tecker	A. Gillespie		K. Wittenburg	M.Wendt		V. Kornilov	A. Gallo			
09:30		BD Requirements Overview/Measurement Principles I	Analog Electronics I	Tune, Chromaticity & Coupling Measurements	Diagnostics examples from HE colliders	Bunch Length Diagnostics I	Application of Lasers in Beam Instrumentation		BPM systems I	Medical Applications Instrumentation & Diagnostics	Beam Loss Monitors	Timing and Synchronization I	Collective Effects & its diagnostics II			
G. Kube		J. Bellemann	R. Jones	R.Jones	A. Gillespie	S. Gibson	M. Wendt		A. Peters	K. Wittenburg	A. Gallo	V. Kornilov				
10:30		Coffee														
11:00		Transverse beam dynamics recap I	RF measurement techniques	Analog Electronics II	Linear Imperfections and Corrections I	Lasers (technologies & setups)	Transverse Profile Measurements I		Transverse Profile Measurements II	Analog Digital Conversion	Schottky Diagnostics	Halo diagnostics	Diagnostic Needs for Wakefield Accelerator Experiments			
H.Schmickler		M. Wendt	J. Bellemann	J. Wenninger	S. Gibson	E. Bravin	E. Bravin		M. Gasior	P. Kowina	K. Wittenburg	A. Cianchi				
12:00		BD Requirements Overview/Measurement Principles II	Video Cameras (signal generation and transmission)	Discussion/Q&A I	Introduction to Optics (basics, components, diffraction)	Linear Imperfections and Corrections II	Discussion/Q&A II		Intensity Measurements	Emitance Measurements	Diagnostics Examples from lepton-linacs and FELs	Discussion/Q&A III	Transverse Feedbacks			
G. Kube		B. Walasek-Hoehne	H.Schmickler	S. Gibson	J. Wenninger	H.Schmickler	A. Peters		E. Bravin	A. Cianchi	H.Schmickler	H.Schmickler				
13:00		Lunch														
14:30		Transverse beam dynamics recap II	Block A-1	Block A-4	Free	Block B-1	Block B-4		Block C-1	Block C-4	Free	Block D-1	Block D-4			
H.Schmickler		Course Team	Course Team	Course Team		Course Team										
15:30		Longitudinal beam dynamics recap	Block A-2	Block A-5		Block B-2	Block B-5		Block C-2	Block C-5		Block D-2	Block D-5			
F. Tecker		Course Team	Course Team	Course Team		Course Team										
16:30	Coffee	Coffee		Coffee		Coffee		Coffee								
17:00	Transverse beam dynamics recap III	Block A-3	Block A-6	Block B-3		Block B-6	Block C-3	Block C-6	Block D-3	Block D-6						
H.Schmickler	Course Team	Course Team	Course Team	Course Team	Course Team	Course Team	Course Team	Course Team	Course Team							
18:00	OneS-OneM				How the forest breathes	Poster session		Space and Space Weather			Closing					
All					M. Kulmala	Organizer		M. Palmroth								
19:30	Dinner				Dinner				Dinner							
21:00				Dinner in Helsinki				social event								