Program for the CAS course on "Mechanical & Materials Engineering" June 2024

2	3	4	5	6	7	8	9		11	12	13	14	15
Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun		Tue	Wed	Thu	Fri	Sat
08:00	-			·							·		
08:30	Opening	Standards and Safety	Steels & Stainless Steels II	D	Beam Intercepting Devices	Additive Manufacturing	F	Welding I	Vacuum systems for Accelerators		Fabrication summary	Detector Magnets and Structures	
	F. Tecker / J.Visser / A.Bertarelli	Luca Dassa (CERN)	Stefano Sgobba (CERN)		Davide Reggiani (PSI)	A. Astarita (Univ. of Naples)		Frank Moll (SLV)	Vincent Baglin (CERN)		Said Atieh (CERN)	Herman Ten Kate (ex- CERN)	
09:30	Introd. to Mechanics and Structures I	Computational Tools I (design)	Machining		NC magnets	Large structures for Fusion Technology		Introduction to Metrology	Forming		Undulators	Collider basics	
	Martina Scapin (Polito)	Federico Carra (CERN)	Julius Tschoepel (IPK)		Stephane Sanfilippo (PSI)	Neil Mitchell (Gauss Fusion)		Paul Shore (NPL - UK)	Charbel Moussa (CEMEF)		Haimo Joehri (PSI)	Hermann Schmickler (ex- CERN)	
10:30		Coffee		Visit to DIFFER (all groups)	Co	ffee		Co	offee	Free study time	Co	ffee	
11:00	Introd. to Mechanics and Structures II	Computational Tools II (fabrication)	Mechanical measurements		SC magnets	Design for Additive Manufacturing	is lon	Vacuum brazing	Measurement Uncertainty		RF Applications	Beam instrumentation	
uc	Martina Scapin (Polito)	Federico Carra (CERN)	Kurt Artoos (CERN)		Stephane Sanfilippo (PSI)	A. Astarita (Univ. of Naples)		Serge Mathot (CERN)	Samanta Piano (Nottingham)		Thomas Lucas (PSI)	Ray Veness (CERN)	
egistratic	Introduction to Engineering Materials	Non Destructive Testing	Plastics and Composite Materials		Cryostats and cryomodules	Digital Twins for Accelerators and Detectors		Welding II	Surface Treatments & Coatings		RF Power and Couplers	Alignment and Metrolog	
and re	A. Arauzo (Univ. Zaragoza)	Gonzalo Arnau (CERN)	Ana Teresa Perez (CERN)		Vittorio Parma (CERN)	Oscar Sacristan (CERN)		Romain Gerard (CERN)	Mauro Taborelli (CERN)		Eric Montesinos (CERN)	Hélène Mainaud (CERN)	e day
13:00		Lunch								Ţ,			
14:30 Purival	Introduction to Design for Accelerators	Mechanical Testing	Mech. Meas.(Group A) Design (Group B) NDT (Group C) Study time (Group D)	Mech. Meas.(Group D) Design (Group A) NDT (Group B) Study time (Group C)	Mech. Meas.(Group C) Design (Group D) NDT (Group A) Study time (Group B)	Mech. Meas.(Group B) Design (Group C) NDT (Group D) Study time (Group A)		Metrology (Gr. A) Fabrication (Group B) Visit Firm 1 (Groups C & D	Metrology (Gr. C) Fabrication (Group D)) Visit Firm 1 (Groups A & B)	Metrology (Gr. B) Fabrication (Group A)) Visit Firm 2 (Groups C & D)	Metrology (Gr. D) Fabrication (Group C) Visit Firm 2 (Groups A & B)	Accelerator Technology Highlights	Departure
	Marc Timmins (CERN)	Klaus Peter Weiss (KIT)										Hermann Schmickler (ex- CERN)	
15:30	Physical properties & testing	Steels & Stainless Steels I										Closing	
16:00	A. Arauzo (Univ. Zaragoza)	uzo (Univ. Zaragoza) Stefano Sgobba (CERN) Coffee						Coffee				F. Tecker	
16:30	Coffee						1 '					Coffee	
17:00	Sustainable and Affordable Design	Non Ferrous Materials	Mech. Meas.(Group A) Design (Group B) NDT (Group C) Study time (Group D)	Mech. Meas.(Group D) Design (Group A) NDT (Group B) Study time (Group C)	Mech. Meas.(Group C) Design (Group D) NDT (Group A) Study time (Group B)	Mech. Meas.(Group B) Design (Group C) NDT (Group D) Study time (Group A)	ļ	Metrology (Gr. A) Fabrication (Group B) Visit Firm 1 (Groups C & D)	Metrology (Gr. C) Fabrication (Group D)) Visit Firm 1 (Groups A & B)	Metrology (Gr. B) Fabrication (Group A) Visit Firm 2 (Groups C & D)	Metrology (Gr. D) Fabrication (Group C) Visit Firm 2 (Groups A & B)		
	Wilfried van Kessel (VDL)	Ignacio Aviles (CERN)											
18:00												- 	
18:30	1S1M		Seminar I		Seminar II								
19:30						Dinner			•				
									cinema evening			gala dinner	