

Program for the CAS course on "Magnet technology and Magnet measurements"

Date	19/11	20/11	21/11	22/11	23/11	24/11	25/11	26/11	27/11	28/11	29/11	30/11	01/12	02/12			
Day	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat			
08:30	Arrival day and registration	Opening	Field description for magnets	Materials for magnets & measurements II	RT Magnet design - mechanical I	Superconductivity	SC Magnet design - electro-magnetical II	Excursion	Superferric magnets	SC magnet fabrication	SC magnet testing	Metrology, alignment & fiducialisation	PM magnet	Departure day			
		Vector algebra								Dynamic field effects II	Wire measurement systems	heat transfer, cryostat, conduction cooling I	Dynamic effects, reproducibility for RT magnets		Insertion devices		
09:30		Vector Analysis	Basic of numerical field computation	RT Magnet design - electro-magnetical I	RT magnet fabrication	Technical Superconductors I	SC Magnet design - mechanical I										
10:30		coffee break									coffee break						
11:00		Basics on electrotechniques & Maxwell Equations I	Materials for magnets & measurements I	RT Magnet design - electro-magnetical II	RT Magnet design - mechanical II	Technical Superconductors II	SC Magnet design - mechanical II			Magnetic measurements systems - overview	mapping techniques (hall probes)	heat transfer, cryostat, conduction cooling II	injection&extraction devices		low emittance ring magnets		
12:00		Basics on electrotechniques & Maxwell Equations II	Magnetic field computation using FEM	powering infrastructures	RT magnet testing	SC Magnet design - electro-magnetical I	Dynamic field effects I			Rotating coils, flux metric measurement methods	online measurement monitoring & operational issues	Quench detection & Magnet protection	magnets for medical applications		collider magnets		
13:00		lunch break									lunch break						
14:30		Beam optics	Analytical /Numerical design of RT magnets		Coil design of SC magnets, mechanical design	Medaustron Visit	Coil design of SC magnets, mechanical design			Laboratories I		Laboratories II					
15:30		Magnet types and tolerances															
16:30		coffee break									coffee break						
17:00		dielectric insulation & HV issues	Analytical/Numerical design of RT magnets		Coil design		Coil design			Laboratories I		Laboratories II					
18:00																	
		1S1M														closing	
19:30		Dinner													gala dinner		
									cinema evening								