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

### Sunday (Arrival day and registration)
- **13:00** Coffee
- **14:30** Introduction to Design for Accelerators
  - A. Arauzo (Univ. Zaragoza)
  - Stefano Sgobba (CERN)
  - Hermann Schmickler (ex-CERN)

### Monday (Introduction to Mechanics and Structures I)
- **9:30** Coffee
- **10:00** Intro to Mechanics and Structures I
  - Martina Scapin (Polito)
  - Federico Carra (CERN)
  - Ignacio Aviles (CERN)
- **11:00** Coffee
- **12:00** Introduction to Mechanics and Structures II
  - Non Destructive Testing
  - Martina Scapin (Polito)
  - Federico Carra (CERN)
  - Stefano Sgobba (CERN)
- **13:00** Lunch
- **13:30** Mechanical Testing
  - A. Arauzo (Univ. Zaragoza)
  - Stefano Sgobba (CERN)
  - Coffee
- **14:00** Standards and Safety
  - Mechanical measurements
  - Luca Dassa (CERN)
  - Coffee
- **14:30** Coffee
- **15:00** H
- **15:30** Coffee
- **16:00** Metrology (Gr. A)
  - Visit Firm 3 (Groups A & C)
- **16:30** Coffee
- **17:00** Metrology (Gr. C)
  - Visit Firm 3 (Groups A & B)
- **17:30** Coffee
- **18:00** Dinner

### Tuesday (Materials Focus)
- **9:00** Coffee
- **9:30** Sustainable and Affordable Design Steels & Stainless Steels II
  - Wilfried van Kessel (VDL)
  - Stefano Sgobba (CERN)
- **10:00** NC magnets
  - Large structures for Fusion Technology
  - Motto (ILV)
  - A. Asta (Univ. of Naples)
- **10:30** Beam instrumentation
  - Additive Manufacturing
  - Ray Vennes (CERN)
  - A. Asta (Univ. of Naples)
- **11:00** Coffee
- **11:30** Free study time or visit to Firm 3 (Group A)
- **12:00** Coffee
- **12:30** Metrology (Gr. B)
  - Visit Firm 2 (Groups A & B)
- **13:00** Coffee
- **13:30** Metrology (Gr. D)
  - Visit Firm 2 (Groups A & B)
- **14:00** Metrology (Gr. A)
  - Visit Firm 1 (Groups A & B)
- **14:30** Coffee
- **15:00** Metrology (Gr. C)
  - Visit Firm 1 (Groups A & B)
- **15:30** Coffee
- **16:00** Metrology (Gr. B)
  - Visit Firm 1 (Groups A & B)
- **16:30** Coffee
- **17:00** Metrology (Gr. D)
  - Visit Firm 1 (Groups A & B)
- **17:30** Coffee
- **18:00** Dinner

### Wednesday (Metrology & Engineering Materials)
- **9:00** Coffee
- **9:30** Mechanical Testing
  - Mech. Meas.(Group A)
  - Design (Group B)
  - Mech. Meas.(Group C)
  - Design (Group D)
- **10:00** Coffee
- **10:30** Metrology (Gr. A)
  - Fabrication (Group B)
  - Visit Firm 1 (Groups A & B)
- **11:00** Coffee
- **11:30** Metrology (Gr. C)
  - Fabrication (Group B)
  - Visit Firm 1 (Groups A & B)
- **12:00** Coffee
- **12:30** Metrology (Gr. D)
  - Fabrication (Group C)
  - Visit Firm 1 (Groups A & B)
- **13:00** Coffee
- **13:30** Metrology (Gr. A)
  - Fabrication (Group C)
  - Visit Firm 1 (Groups A & B)
- **14:00** Coffee
- **14:30** Metrology (Gr. C)
  - Fabrication (Group C)
  - Visit Firm 1 (Groups A & B)
- **15:00** Coffee
- **15:30** Metrology (Gr. D)
  - Medical Applications with Accelerators
  - Visit Firm 1 (Groups A & B)
  - Coffee
- **16:00** Coffee
- **16:30** Metrology (Gr. A)
  - Visit Firm 2 (Groups A & B)
- **17:00** Coffee
- **17:30** Metrology (Gr. C)
  - Visit Firm 2 (Groups A & B)
- **18:00** Dinner

### Thursday (Standards and Safety)
- **9:00** Coffee
- **9:30** Mechanical Testing
  - Mech. Meas.(Group A)
  - Design (Group B)
  - Mech. Meas.(Group C)
  - Design (Group D)
- **10:00** Coffee
- **10:30** Metrology (Gr. A)
  - Visit Firm 1 (Groups A & B)
- **11:00** Coffee
- **11:30** Metrology (Gr. C)
  - Visit Firm 1 (Groups A & B)
- **12:00** Coffee
- **12:30** Metrology (Gr. D)
  - Visit Firm 1 (Groups A & B)
- **13:00** Coffee
- **13:30** Metrology (Gr. A)
  - Visit Firm 2 (Groups A & B)
- **14:00** Coffee
- **14:30** Metrology (Gr. C)
  - Visit Firm 2 (Groups A & B)
- **15:00** Coffee
- **15:30** Metrology (Gr. D)
  - Visit Firm 2 (Groups A & B)
- **16:00** Coffee
- **16:30** Metrology (Gr. A)
  - Visit Firm 2 (Groups A & B)
- **17:00** Coffee
- **17:30** Metrology (Gr. C)
  - Visit Firm 2 (Groups A & B)
- **18:00** Dinner

### Friday (Closing)
- **9:00** Coffee
- **9:30** Mechanical Testing
  - Mech. Meas.(Group A)
  - Design (Group B)
  - Mech. Meas.(Group C)
  - Design (Group D)
- **10:00** Coffee
- **10:30** Metrology (Gr. A)
  - Visit Firm 1 (Groups A & B)
- **11:00** Coffee
- **11:30** Metrology (Gr. C)
  - Visit Firm 1 (Groups A & B)
- **12:00** Coffee
- **12:30** Metrology (Gr. D)
  - Visit Firm 1 (Groups A & B)
- **13:00** Coffee
- **13:30** Metrology (Gr. A)
  - Visit Firm 2 (Groups A & B)
- **14:00** Coffee
- **14:30** Metrology (Gr. C)
  - Visit Firm 2 (Groups A & B)
- **15:00** Coffee
- **15:30** Metrology (Gr. D)
  - Visit Firm 2 (Groups A & B)
- **16:00** Coffee
- **16:30** Metrology (Gr. A)
  - Visit Firm 2 (Groups A & B)
- **17:00** Coffee
- **17:30** Metrology (Gr. C)
  - Visit Firm 2 (Groups A & B)
- **18:00** Dinner

### Saturday
- **9:00** Coffee
- **9:30** Mechanical Testing
  - Mech. Meas.(Group A)
  - Design (Group B)
  - Mech. Meas.(Group C)
  - Design (Group D)
- **10:00** Coffee
- **10:30** Metrology (Gr. A)
  - Visit Firm 1 (Groups A & B)
- **11:00** Coffee
- **11:30** Metrology (Gr. C)
  - Visit Firm 1 (Groups A & B)
- **12:00** Coffee
- **12:30** Metrology (Gr. D)
  - Visit Firm 1 (Groups A & B)
- **13:00** Coffee
- **13:30** Metrology (Gr. A)
  - Visit Firm 2 (Groups A & B)
- **14:00** Coffee
- **14:30** Metrology (Gr. C)
  - Visit Firm 2 (Groups A & B)
- **15:00** Coffee
- **15:30** Metrology (Gr. D)
  - Visit Firm 2 (Groups A & B)
- **16:00** Coffee
- **16:30** Metrology (Gr. A)
  - Visit Firm 2 (Groups A & B)
- **17:00** Coffee
- **17:30** Metrology (Gr. C)
  - Visit Firm 2 (Groups A & B)
- **18:00** Dinner

### Meteo
- **13:00** Lunch
- **13:30** Lunch
- **14:00** Lunch
- **14:30** Lunch

### Coffee
- **11:30** Coffee
- **12:00** Coffee
- **12:30** Coffee
- **13:00** Coffee
- **13:30** Coffee
- **14:00** Coffee
- **14:30** Coffee
- **15:00** Coffee
- **15:30** Coffee
- **16:00** Coffee
- **16:30** Coffee
- **17:00** Coffee
- **17:30** Coffee
- **18:00** Coffee

### Closing
- **14:30** Seminar I
  - Coffee
- **15:30** Seminar II
  - Coffee

### Departure day
- **10:00** Departure