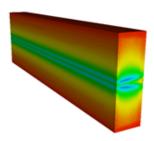
Workshop on Materials for Collimators and Beam Absorbers



Contribution ID: 45 Type: not specified

Experimental methods for material measurements at high strain-rate

Tuesday 4 September 2007 15:00 (20 minutes)

The detailed mechanical characterization of a material is the very first step in the design of structural components

Depending on the type of application (dynamic, impact, thermal loading, fatigue...) different types of tests, experimental methods, and testing equipments are required. After a general introduction about the effects of dynamic

loading on material behaviour, several related test methods will be outlined and discussed. The experimental equipment, available at the Reliability and Safety Laboratory of Politecnico di Torino for static and dynamic characterization of materials, will be described in detail and some examples of the most interesting results will be

presented, with particular attention to metals, polymers, and various types of composites and joints. Co-authors: PERONI Lorenzo (Politecnico Di Torino)

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Session Classification: Session 3: Experimental results and future tests / test station

Track Classification: Experimental methods for material measurements at high strain-rate