

GFA & SwissFEL Accelerator Seminar

The Multipole Factory and the Toy Train – Measuring Local Field Distributions in Accelerator Magnets

Monday, 11 April 2016, 16.00 h, WBGB/019

Stephan Russenschuck, CERN

The lecture will concentrate on the theory and techniques for measuring and post-processing of local field distributions in accelerator magnets and solenoids. In the magnetic measurement section at CERN we have recently developed moving flux meters for the dipoles of the SuperFRS project at GSI, a solenoidal field transducer, and a transversal field transducer (aka toy train). The multipole factory is an oversampling method that allows the measurement of large-aperture magnets using a small diameter shaft. I will also talk about establishing the coherence between these measurements and the needs for beam physics, and magnet design and construction. Contact: Andreas Adelman

