



Contribution ID: 244

Type: **Poster Presentation of 1h45m**

Static and transient magnetic design of a Septum magnet for ThomX accelerator

Tuesday, August 29, 2017 1:15 PM (1h 45m)

ThomX is a Compton source project in the range of the hard X rays (40 / 90 keV). The machine is composed of an injector Linac and a storage ring where an electron bunch collides with a laser pulse accumulated in a Fabry-Perot resonator.

The injection and extraction of the beam in the storage ring is managed by an UHV eddy current septum magnet. This eddy current septum magnet has to generate a full sinus pulse, 150 mT peak and 130 μ s period. Magnetic and thermal 3D models, have been performed on OPERA FEA Software (ELEKTRA and TEMPO solvers), to analyse the transient behavior of the magnet. Results of this modelling are presented.

Submitters Country

france

Primary authors: Mr COSSON, Olivier; JEHANNO, Patrice

Presenters: Mr COSSON, Olivier; JEHANNO, Patrice

Session Classification: Tue-Af-Po2.04

Track Classification: C2 - Resistive and Pulsed High-Field Magnets