Contribution ID: 68

G-2 ANSYS Mechanical Simulation for Lithium Lens

Tuesday, 20 May 2014 17:30 (1h 30m)

Lithium Collection Lenses were used to collect anti-protons for decades during the Tevatron collider run at Fermilab. This investigation looks at using the same Lithium Lens design for future use for muon production during the g-2 experiment at Fermilab; where thermal loading is much less per pulse, but the repetition rate is much higher. A transient ANSYS analysis was performed comparing the two cases. Results and failure modes are presented along with some special operating conditions that are possible with the g-2 timeline.

Primary author: SCHULTZ, Ryan (Fermilab)
Co-authors: Mr STILL, Dean (Tevatron); Mr HURH, Patrick (FNAL)
Presenter: SCHULTZ, Ryan (Fermilab)
Session Classification: HPTW Poster Session & Reception

Track Classification: Target Facility Simulation Challenges