

The Sinuous Target

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

We present the concept for a target material comprised of a multitude of interlaced wires of small dimension. The wires will be made of a thermal-shock resistant material, but will not be subject to stress accumulation due to their small size. The intrinsic bends of the wires will allow them to absorb the strain of thermal shock with minimal stress. The bulk of this material will have a dramatically lower bulk modulus than the bare material, greatly improving its resistance to thermal shock. Furthermore, the interlaced nature of the wires provides containment of any segment that might become loose. The small feature size enhances the healing ability of the material. Some concepts for use will be presented, including fabrication and cooling techniques.

Primary author: Dr ZWASKA, Bob (Fermilab)

Presenter: Dr ZWASKA, Bob (Fermilab)

Session Classification: HPTW Poster Session & Reception

Track Classification: Target Design Challenges