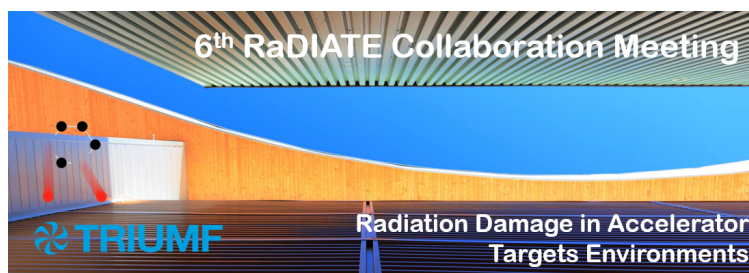


6th RaDIATE Collaboration Meeting



Contribution ID: 7

Type: Oral presentation

The current Status of CSNS solid target

Monday, 9 December 2019 11:50 (25 minutes)

A 100 kW solid target was successfully developed for the CSNS phase one. Tungsten was selected as the CSNS target material and a layer of tantalum with a thickness of only 0.3mm as a protective layer. Eleven target blocks were fixed in parallel in a stainless steel target container with 1.2mm gap between each block. Using a specially designed spreader, the target plug can be easily replaced. During the nearly two years of operation, the parameters of the target cooling water were stable and normal, the temperature rise of the target cooling water inlet and outlet increased as the proton beam power increased. Every year, the target surface was carefully observed by a high definition camera in the hot cell. Last year, no abnormal were found on the target surface, however, the surface of the target showed signs of turning yellow in some regions.

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Session Classification: 1st Oral Session