

Seminar

Institute for Plasma Research

Title : Overview of Comparison of Plasma-Wall Interactions (PWI) in Tungsten and Carbon First Wall Tokamaks

Speaker : Dr. P. N. Maya
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Date : 6th November 2015 (Friday)

Time : 03.30 PM

Venue : Seminar Hall, IPR

Abstract:

PWI studies in the last two decades have shown that despite better plasma performance and high heat handling properties, carbon may not be the best choice of wall material due to high erosion & subsequent codeposition that can lead to unacceptable fuel retention. Tungsten, having low erosion yields and high melting point will be used in ITER divertor. Recently, tokamaks with carbon first wall are replaced either completely or partially with tungsten to study the PWI in the context ITER and to explore their extension to DEMO. In this talk an overview of some of the recent observations of plasma-wall interactions in tungsten tokamaks is discussed in comparison with carbon first wall. We shall also discuss some of the ongoing activities of understanding PWI in presence of fusion neutrons.
