

Prediction of spatial resolutions of future IR cameras at ITER

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Abstract

Here are presented the predictions of the spatial resolutions of one of the future IR camera that will survey the divertor of the Tokamak ITER. The objective is to associate, in Fourier space, the Optical Transfer Function (OTF) and the Detector Transfer Function (DTF) to calculate the Total Transfer Function (TTF) of the virtual IR camera. The Modulation Transfer Function (MTF, modulus of TTF) quantifies the 'imaging' performances of the virtual camera. Its 'measuring' performances are estimated by the simulation of the Slit Response Function (SRF) experiment. Finally some results of sharp temperature profile measurements in realistic plasma situations are presented.

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