

Abstract Submitted  
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**Divertor and confinement issues for next-step devices.**<sup>1</sup> MICHAEL KOTSCHENREUTHER, PRASHANT VALANJU, SWADESH MAHAJAN, Institute for Fusion Studies — Next step devices operating in advanced tokamak (AT) modes include proposed experiments (including NHTX and FDF), Component Test Facilities (CTFs), and ITER. We present an analysis of the likely scrape-off layer widths and heat loads on the divertors for such devices. We include analysis of novel divertor configurations including X-divertors and stochastic edge. The connection between divertor modifications and core plasma confinement is also examined.

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