

Abstract Submitted
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Sorting Category: 5.1.1.2 (experimental)

Plasma Physics Near the Divertor X-Point¹ M.J. SCHAFFER, General Atomics, J. BOEDO, R.A. MOYER, University of California, San Diego — An insertable Langmuir probe array in the DIII-D tokamak divertor reveals plasma potentials that drive a large plasma circulation poloidally around the divertor. The corresponding convection is of the same order as the usually studied SOL and divertor plasma transport processes. Additionally, Thomson scattering and reciprocating Langmuir probe data show higher electron pressures p_e in the X-point region than upstream on the same magnetic surface. This excess p_e is associated with high local density, which might be sustained by the large plasma circulation. Work in progress to understand the physics governing plasma near the divertor X-point will be presented.

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Prefer Oral Session
 Prefer Poster Session

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Special instructions: DIII-D Poster Session II (divertor physics, disruptions, RF, & diagnostics), immediately following Donalies

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