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Sorting Category: 5.1.1.2 (Experimental)

**Particle Transport in DIII-D Internal Transport Barriers**[1] D.R. BAKER, General Atomics — Analysis of particle transport in a tokamak is complicated by the fact that the central particle source is often small and the off diagonal terms in the equation for the particle flux can be larger than the source term in the plasma core. Understanding particle transport then requires the correct calculation of the off diagonal terms. This is especially true for anomalous transporting discharges where the off diagonal terms can be large. In discharges with an Internal Transport Barrier (ITB) the transport coefficients are small and for neutral beams heated plasmas the central source can become important. A particle transport analysis of DIII–D ITB plasmas shows the relative size of the source term, the diagonal term and the off diagonal term in the flux equation and under what situations the off diagonal terms can be neglected.

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☐ Prefer Oral Session
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Special instructions: DIII-D Poster Session 1, immediately following J Mandrekas

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