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**Dimensionless Scaling of Electron Particle Transport  
Versus Energy Transport in DIII-D<sup>1</sup>**

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sity of Wisconsin — The dimensionless scaling of electron particle trans-  
port in DIII-D has been obtained using dimensionless scaling techniques  
developed by Petty and Luce. The particle transport coefficients have  
been obtained by perturbing the density with a modulated deuterium  
gas puff and measuring the propagation of the perturbed density into the  
plasma. The energy transport coefficients were obtained from the usual  
analysis of the power and heat balance of the equilibrium plasma using  
the EFIT and ONETWO codes. For these L-mode shots the electron  
particle diffusion coefficient scaled approximately with Goldston scaling.  
For comparison the effective energy transport of a complementary series  
of shots (reported previously<sup>2</sup>) scaled between Bohm and gyro-Bohm.  
Helium puff experiments were also performed to yield the scaling of the  
helium transport.

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- Prefer Oral Session  
 Prefer Poster Session

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Special instructions: DIII-D Poster Session I (transport, turbulence, & stability), immediately following Simonen

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