

Abstract Submitted  
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**Controlling Surface Dust in a Tokamak**<sup>1</sup> COLIN V. PARKER, Harvey Mudd College, CHARLES H. SKINNER, A.L. ROQUEMORE, Princeton Plasma Physics Laboratory — The potential build-up of dust in next-step fusion devices is a safety concern. In order to maintain the dust inventory below safety limits techniques to assess the dust inventory and methods to remove the dust if it approaches the safety limit are required. A novel electrostatic dust detector to measure the quantity of dust landing on a surface has been demonstrated previously<sup>2,3</sup>. We have applied this device to dust removal from a surface in a vacuum chamber. Measurements of the dust removal efficiency as a function of areal density of incident dust and of the fate of the removed material will be reported.

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<sup>2</sup>A. Bader et al., Rev. Sci. Instrum., 75, (2004) 370.

<sup>3</sup>C Voinier et al., J. Nucl. Mater. in press (2005).

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