

Abstract Submitted
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Preliminary experiments to map the plasma sheath edge above a step electrode ANDREW KURTZ, None, TERRENCE SHERIDAN, Ohio Northern University — We describe an experimental method to measure the shape of the plasma sheath edge above a step electrode using microscopic dust particles. A plasma is created around a step-shaped electrode, and dust particles are dropped from above onto the high side of the step. The dust particles become negatively charged in the plasma and slide along the sheath edge, which roughly conforms to the step geometry. A sheet of laser light illuminates the particles for video capture. The particle trajectories give the sheath edge shape. Preliminary experimental results may be presented.

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