

Abstract Submitted  
for the MAR07 Meeting of  
The American Physical Society

**Roughness Exponent Measurements for the Central Force Model**

JAN Ø. H. BAKKE, ALEX HANSEN, Department of Physics, NTNU, Trondheim, Norway — We study the roughness properties of fracture profiles from the two-dimensional central force lattice model for a wide range of disorders. The intrinsic and the extrinsic roughness exponent have been measured together with the step size distribution  $p(|\Delta h|)$  and the height difference distribution  $p(\Delta h, l)$ . We find that the profiles are self-affine for systems with narrow disorders and that broader disorders introduces overhangs in the fracture surface leading to deviation from self-affinity for small length scales and to non-trivial finite size scaling.

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Date submitted: 29 Nov 2006

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