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**Universality and depinning models for plastic yield in amorphous materials.** ZOE BUDRIKIS, ISI Foundation, via Alassio 11/c 10126 Torino, Italy, DAVID FERNANDEZ CASTELLANO, STEFAN SANDFELD, MICHAEL ZAISER, 8-Materials Simulation, FAU University of Erlangen-Nuremberg, Germany, STEFANO ZAPPERI, Dipartimento di Fisica, Universita di Milano, Italy — Plastic yield in amorphous materials occurs as a result of complex collective dynamics of local reorganizations, which gives rise to rich phenomena such as strain localization, intermittent dynamics and power-law distributed avalanches. While such systems have received considerable attention, both theoretical and experimental, controversy remains over the nature of the yielding transition. We present a new fully-tensorial coarsegrained model in 2D and 3D, and demonstrate that the exponents describing avalanche distributions are universal under a variety of loading conditions, system dimensionality and size, and boundary conditions. Our results show that while depinning-type models in general are apt to describe the system, mean field depinning models are not.

Zoe Budrikis
ISI Foundation, via Alassio 11/c 10126 Torino

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