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Stick-slip patterns in a model frictional interface GEORGIOS TSEKENIS, DEMET TATAR, SHMUEL RUBINSTEIN, DAVID WEITZ, MICHAEL AZIZ, FRANS SPAEPEN, Harvard University — We present measurements of the local displacements during slip-stick motion of two rough surfaces sliding over one another. The surfaces are cast in polymer and have roughness on the order of 30 μm. The displacements are observed by confocal microscopy of embedded fluorescent particles, and measured by PIV. The displacement patterns during large and small slip events are directly observed and analyzed by statistical methods.

Georgios Tsekenis
Harvard University

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