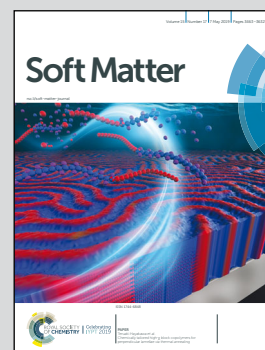


Highlighting research performed by Dr Kuniyasu Saitoh from Tohoku University, in collaboration with Dr Norihiro Oyama from Advanced Industrial Science and Technology, Dr Fumiko Ogushi from the National Institute for Materials Science, and Prof. Stefan Luding from the University of Twente.

Transition rates for slip-avalanches in soft athermal disks under quasi-static simple shear deformations

Sharp drops in the stress of soft athermal disks are triggered by restructuring of force-chain networks. The transition rate of contact forces and angles is a measure of statistical weights for the restructuring. It bridges the gap between microscale mechanics and macroscopic avalanche-sizes. The two pictures highlight different features of slip-events (left) and shear localization (right) in soft athermal disks. Note that the pictures are made from different data.

As featured in:



See Kuniyasu Saitoh et al.,
Soft Matter, 2019, 15, 3487.



ROYAL SOCIETY
OF CHEMISTRY

Celebrating
IYPT 2019

rsc.li/soft-matter-journal

Registered charity number: 207890