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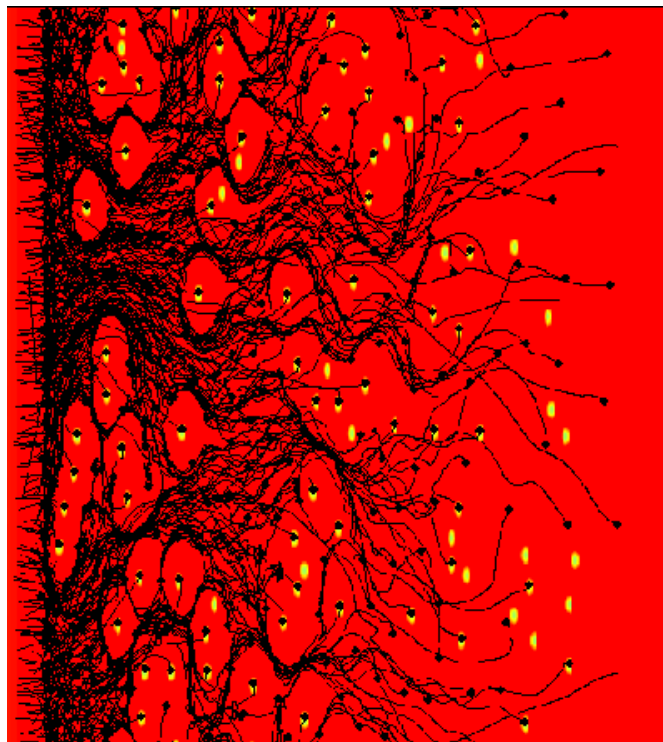
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High Temperature Superconductors

Vortex Dynamics

Instabilities leading to vortex-bundle motion in superconductors are being studied via molecular dynamics simulations. Flux lines in superconductors exhibit avalanche dynamics similar to those observed in other (seemingly unrelated) systems, like granular assemblies and water droplet avalanches. The image shown is a snapshot from a molecular dynamics simulation of field-driven vortices moving in a random pinning potential background. Black dots are vortices. Yellow dots represent short-range pinning wells. Black trails record the path the vortices have taken.

The image is courtesy of Prof. Franco Nori of the University of Michigan. [Additional Information](#)



Magneto-optic Images

Refer to article by Gloria B. Lubkin in Physics Today, March 1996 p. 48 for additional discussion.

