

Discussion on Damien's talk

Non-speculative questions

- **Mechanism governing rejuvenation?**
- **Scalings w.r.t. waiting time t_w / cooling rates?**
- **What minimal ingredients could one add to the («mean-field») Hébraud-Lequeux model?**

Speculative question 1/2

From amorphous systems to disordered-elastic systems?

- **Non-stationary dynamics of interfaces**

Ferrero, Bustingorry & Kolton,

Non-steady relaxation and critical exponents at the depinning transition

Bustingorry

Aging dynamics of non-linear elastic interfaces: the Kardar-Parisi-Zhang equation

Bustingorry, Cugliandolo & Iguain

Out-of-equilibrium relaxation of the Edwards-Wilkinson elastic line

- **What to export to disordered-elastic systems?**

Speculative question 2/2

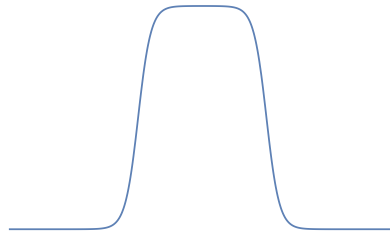
Shear-banding and 'coexistence' picture

- **Depiction through a 1st-order coexistence?**
- **How to probe it?**
 - **Hysteresis, finite-size scalings?**
- **Effective descriptions?**
 - **Model reduction**
 - **Interface in space-time**

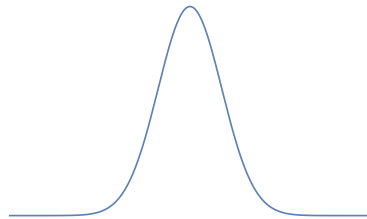
Round table

Shear-banding

- **Classify occurrences**
→ **coexistence of two phases?**



- **one phase + localized excitations**



- **Dynamics of shear-bands?**

RFIM & yielding

- **Observation [Ozawa Berthier Biroli Rosso Tarjus]: same scalings for $P(S)$ & $\langle \sigma \rangle - \sigma_c$ in**
 - **ductile/brittle transition**
 - **mean-field RFIM**
 - **Physical picture / mapping?**
- **Role of the convexity of the elastic kernel.**
- **More Why are mean-field theories so successful?**