

Stick-Slip during adhesive tape peeling

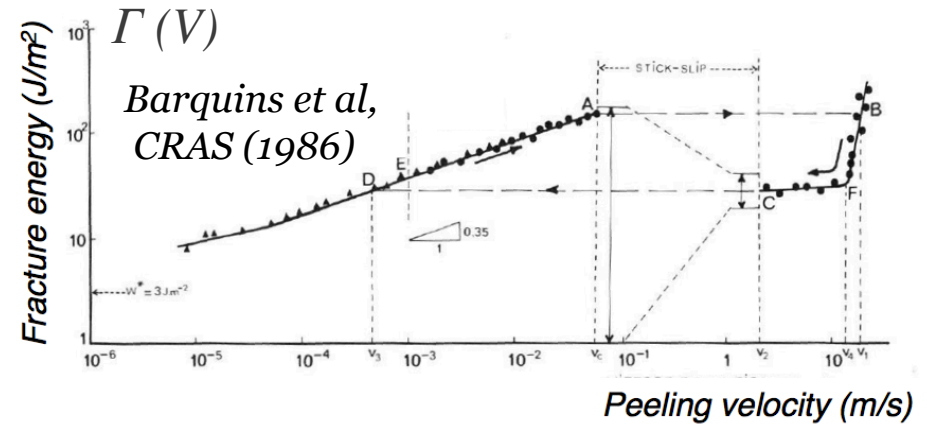


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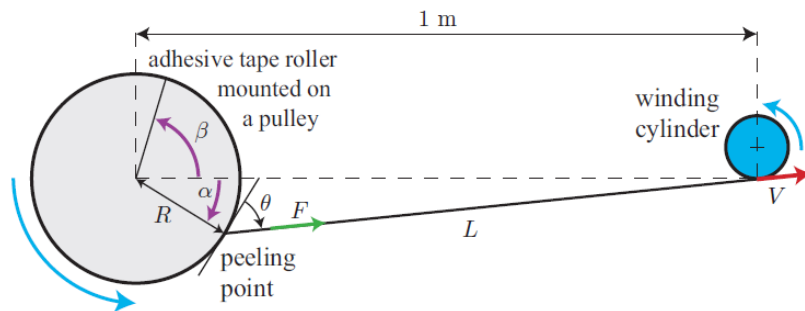
Origin of Stick-Slip Instability

Decreasing regime $\Gamma(V)$
coupled to an elastic tape

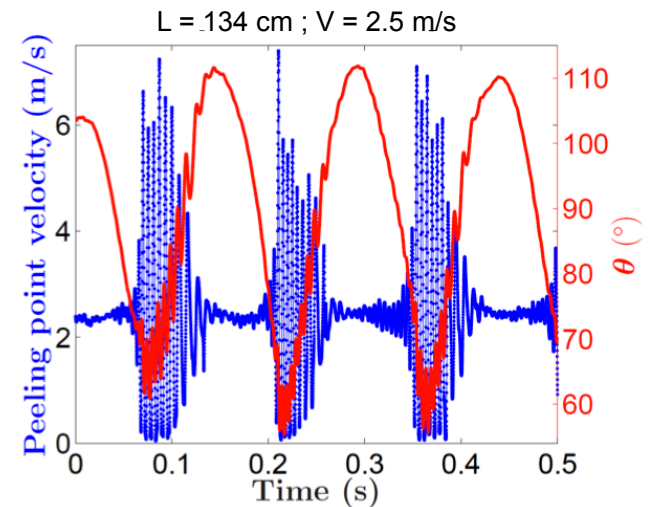


Experiments in Roll geometry

a pendular motion of the roller affects the instability

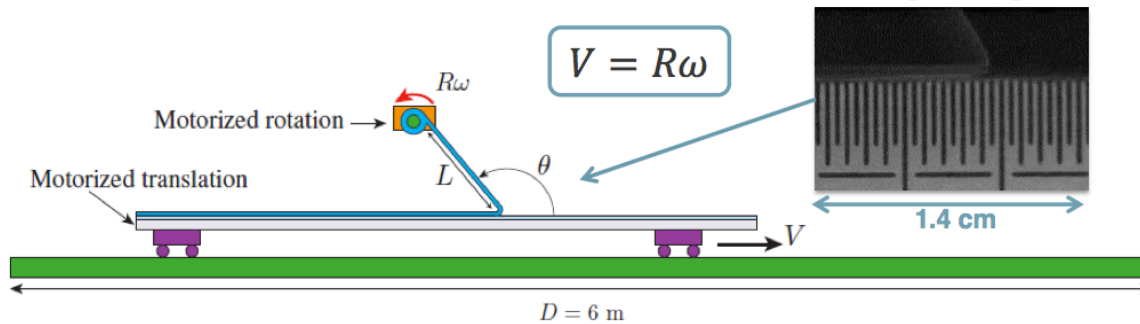


Cortet et al, PRE (2013)

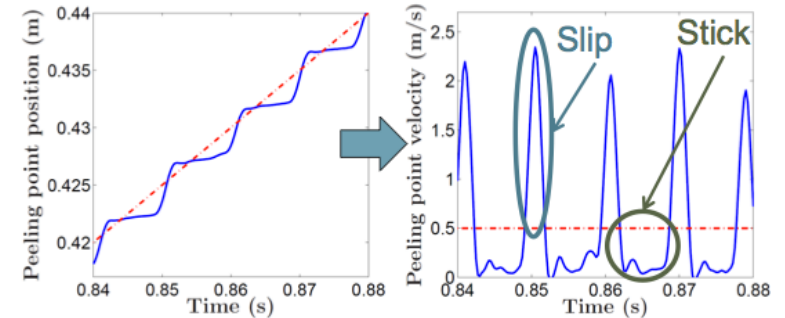


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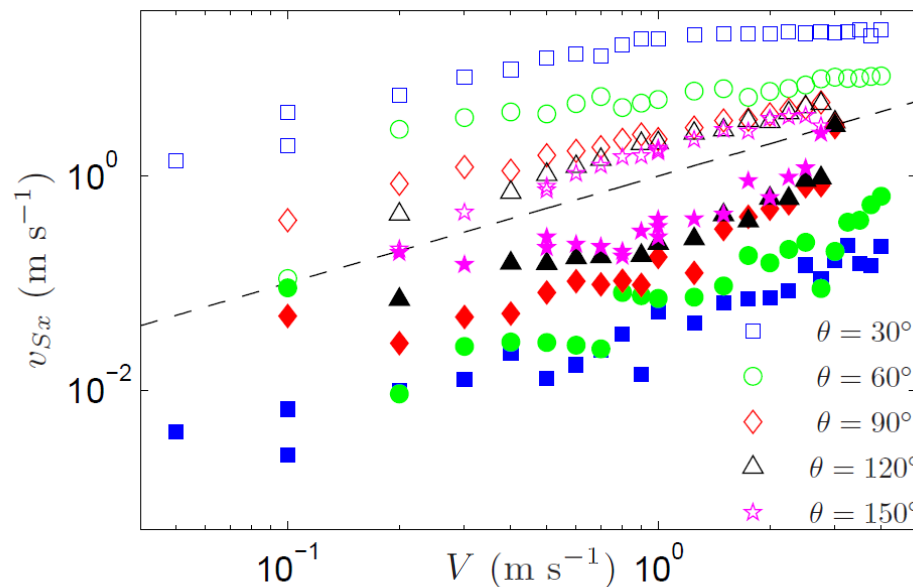
New controlled experiment



- Constant velocity : $0.01 \text{ m/s} < V < 4 \text{ m/s}$
- Constant mean peeled length : $20 \text{ cm} < L < 135 \text{ cm}$
- Constant mean peeling angle : $30^\circ < \theta < 150^\circ$



Stick & Slip velocities



θ has a strong influence on the Stick-Slip instability - threshold, amplitude

When θ decreases :

- $v_{\text{Slip}} - v_{\text{Stick}}$ increases
- the range of velocities V on which we observe Stick-Slip increases

and more on poster ...