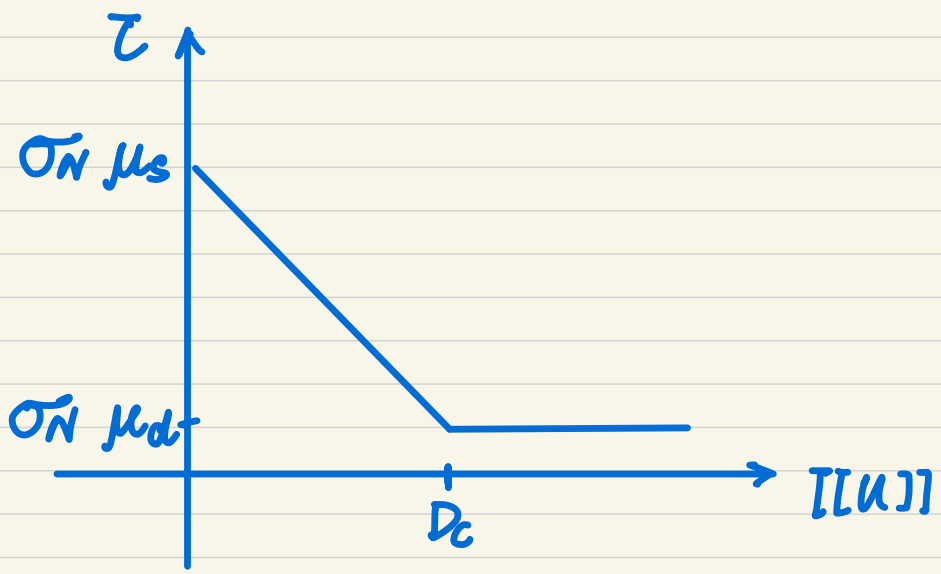
Slip Weakening Friction Law



Parameters:

τ : traction along the interface

μ_s : static friction parameter

μ_d : dynamic friction parameter

D_c : critical displacement jump

σ_N : normal stress

τ_f : shear stress

Two main branches:

① $\tau < \sigma_N \mu_s$

$\tau_f = \tau$ (remain stuck)

② $\tau > \sigma_N \mu_s$

i) $[[u]] < D_c$

$\tau_f = (\mu_s - (\mu_s - \mu_d)|[[u]]|/D_c)(\sigma_N)$ (Linear decreasing)