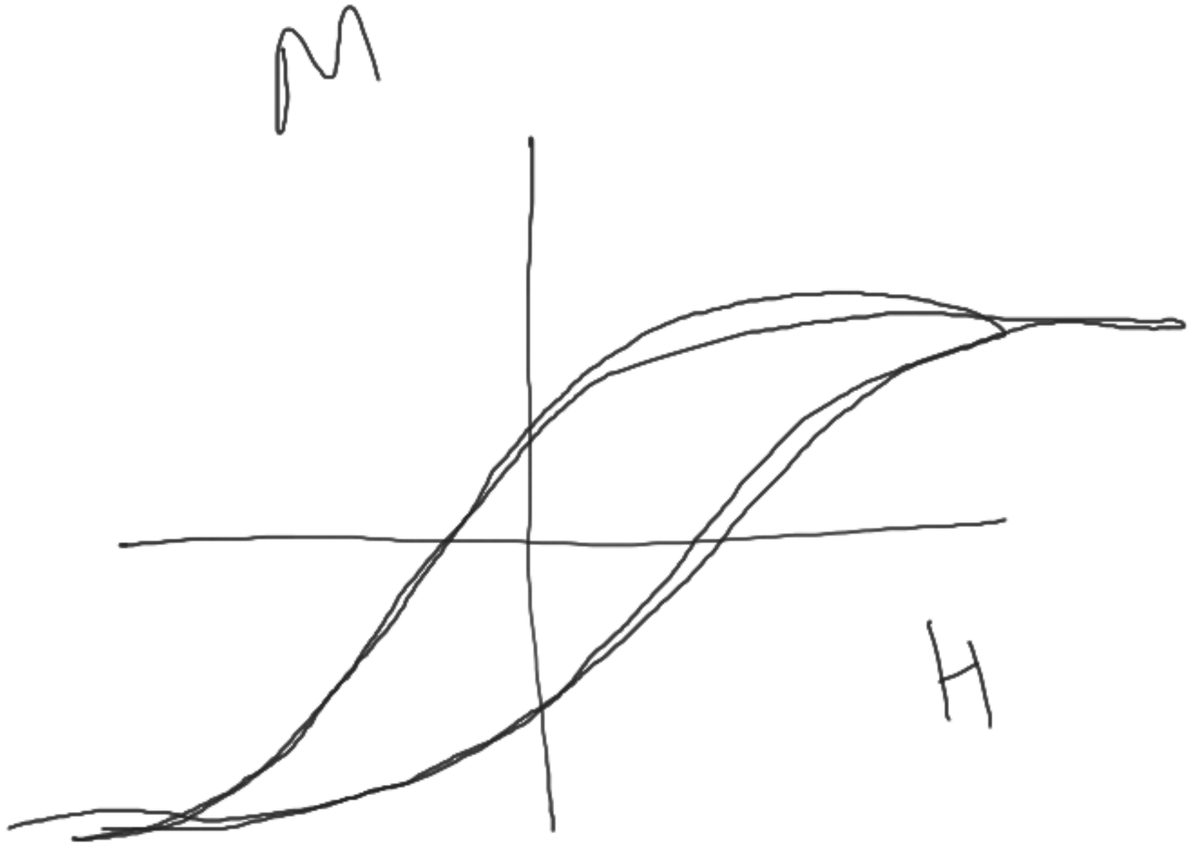
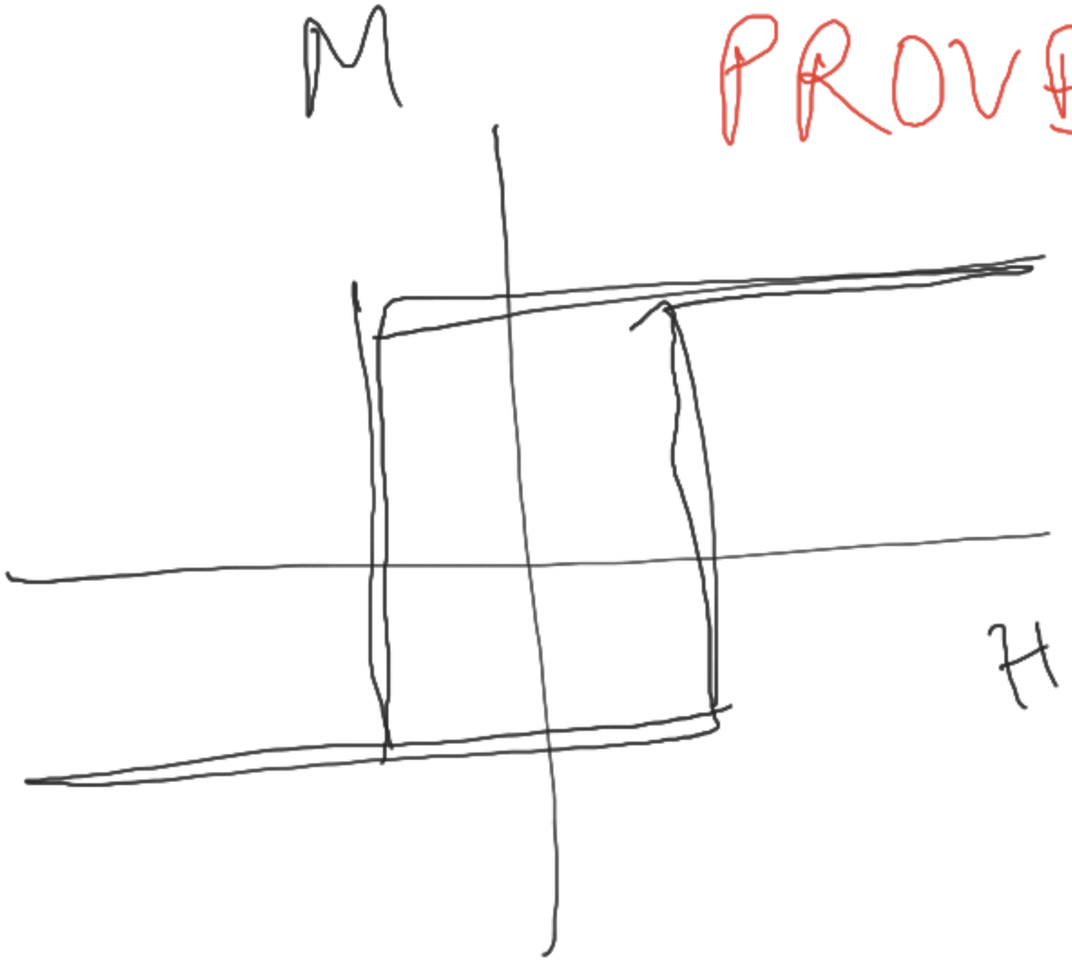


Multi-domain

PROVE

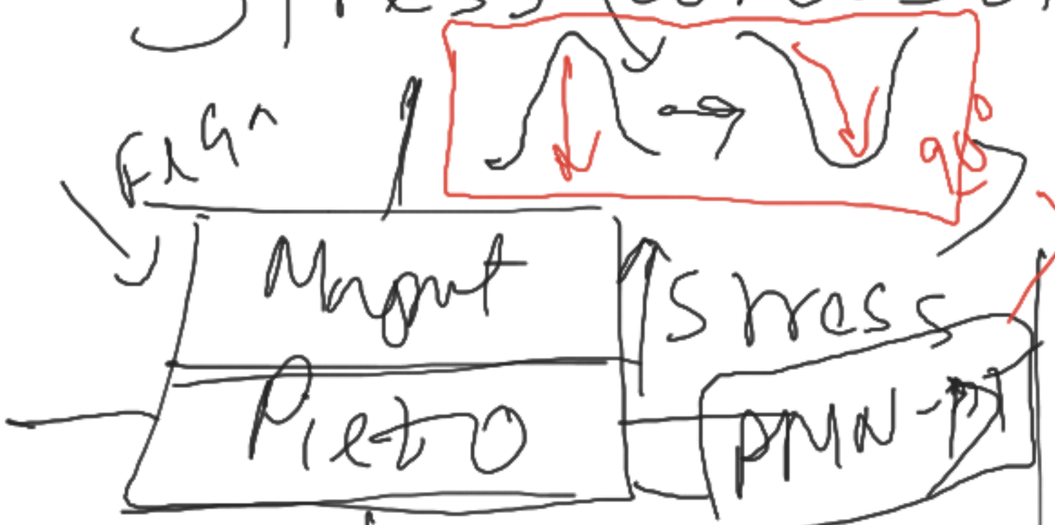


Single-domain

Use potential landsc

1 Oe = $10^3/4\pi$ A/m = 1.602×10^{-19} J

Stress anisotropy $= \left(\frac{3}{2}\lambda\right)\sigma\Omega\cos^2\theta$



Stressing the piezo stress will be elastically transferred to the Magnet stress anisotropy in the magnet-

$3/2\lambda = 150 \times 10^{-6}$

$\gamma = 250 \times 10^9$ Pa

$d = 3000$ pm/V

$t = 100$ nm

$\Omega = 100 \times 90 \times 6$ nm

$V = 50$ mV

voltage across piezo

Calculate σ & S

$\sigma = \gamma S$

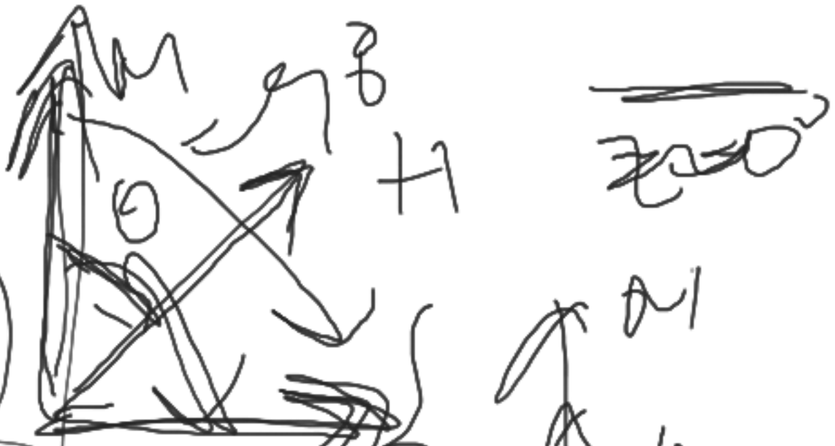
$= \gamma d \frac{V}{t}$

$SA = 2.4 \times 10^{-19}$ J

$E_M = -M \cdot H$

$= -MH\cos(\theta - \theta_M)$

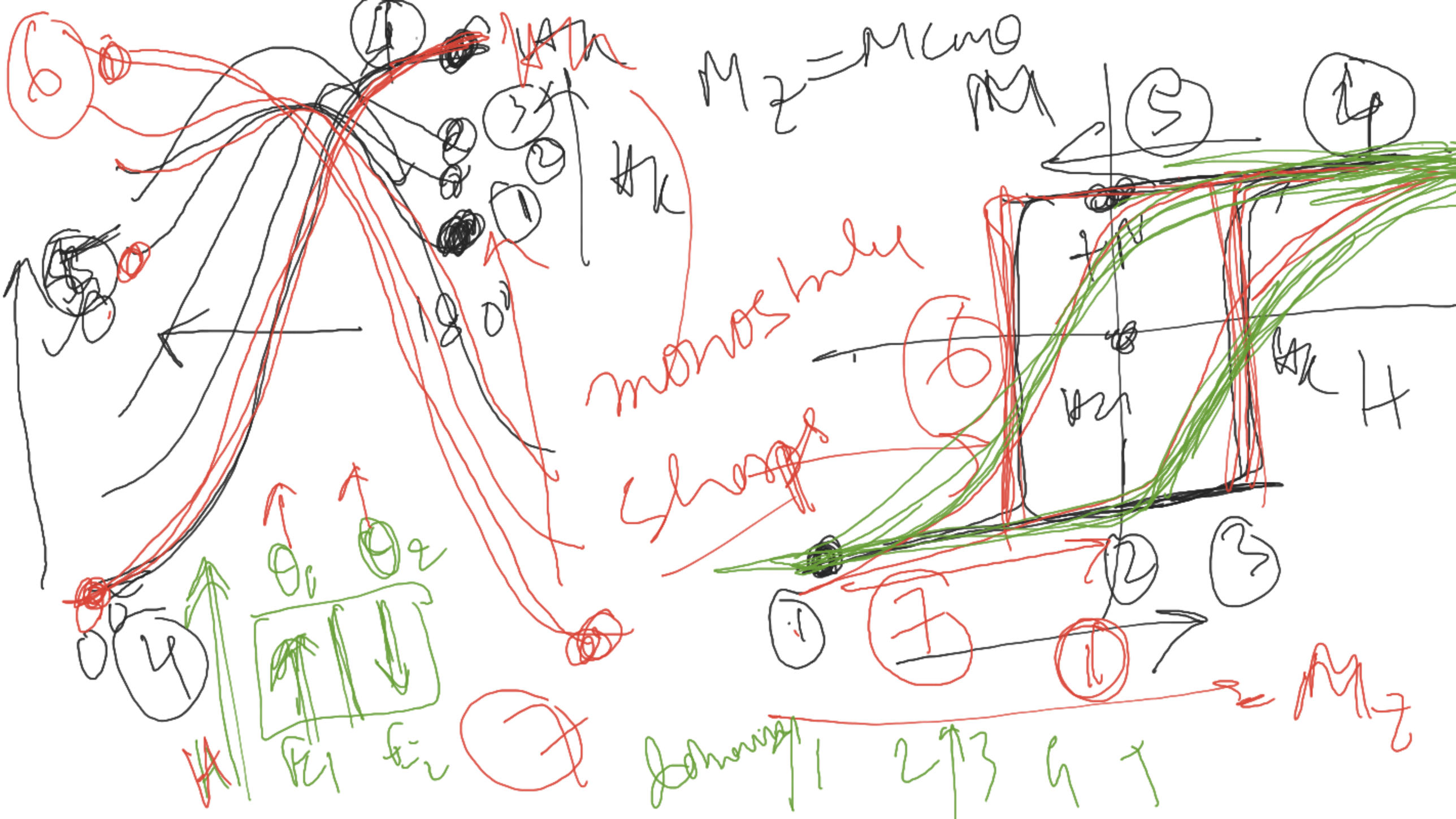
$= -MH\sin\theta \quad (\because \theta - 90^\circ)$

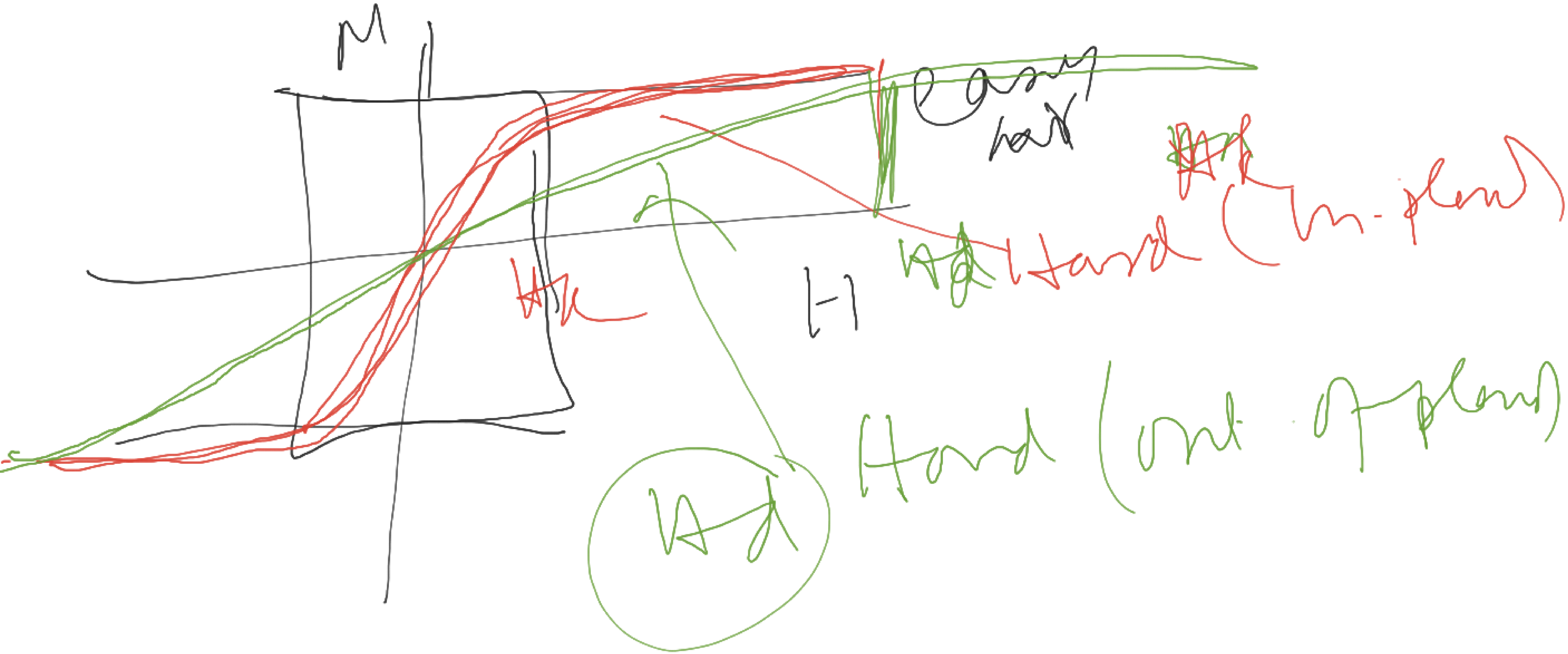


$MH\cos\theta \mid 90^\circ - \theta \Rightarrow MH\sin\theta$

Similar

90° Rotation


Mz = Mcm0
monotonic
changes


M
H
Hard (in-plane)
Hard (out-of-plane)