Project GANIL : fast variable elimination

N. Dlib

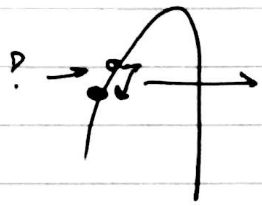
↳ $N = N_{fast} + N_{slow}$

$N_{fast} \to \sim 0$.

⚠ change la CI :

↳  mais important pour :

or



est ce que c'est or à cause des shift ?

$\beta > 2\omega \Rightarrow$ apériodique

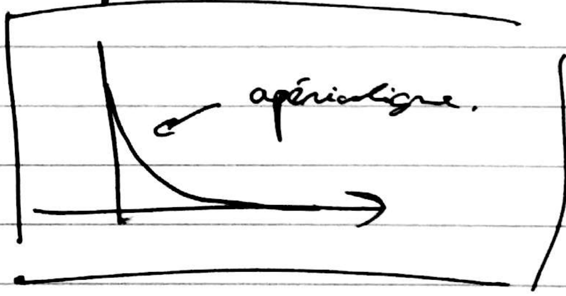
$\beta \gg \omega \Rightarrow$

↳ si $\beta \gg \omega$

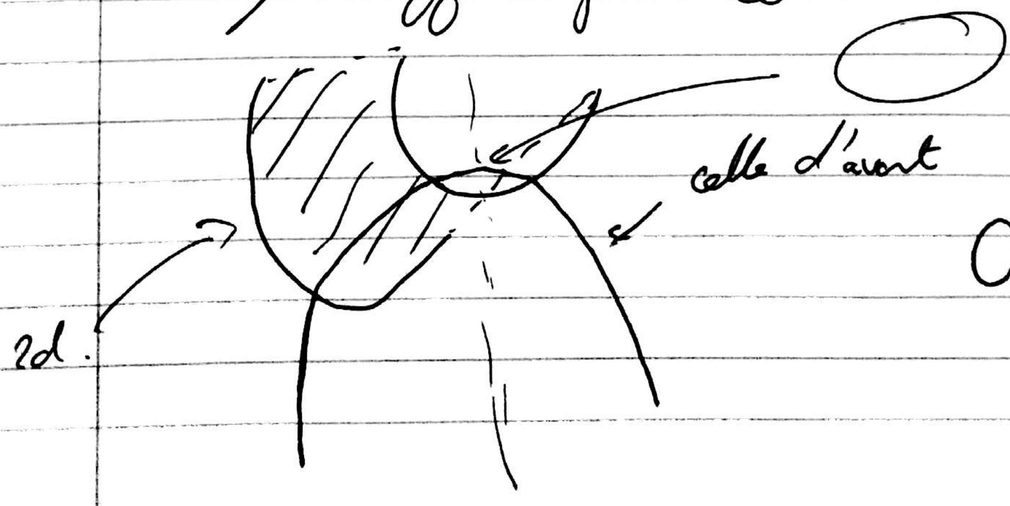
↳ Schmoluchowski

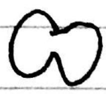
$\cancel{m\ddot{q}} + m\beta\dot{q} + m\omega^2 q = \eta(t)$

$m\ddot{q} \to \sim 0$



⇒ équa diff complète car :





$\Rightarrow$ 2 éqns diff couplées

→ barrière : $\ddot{q}_2 + \beta_2 \dot{q}_2 + \beta_{21} \dot{q}_1 - \omega_2^2 q_2 = x_2(t)$

→ puit : $\ddot{q}_1 + \beta_1 \dot{q}_1 + \beta_{12} \dot{q}_2 - \omega_1^2 q_1 = x_1(t)$

On prend : $* \lambda = \frac{\omega}{\Omega}$

$* \beta_2 = \beta_1$ (> 1)

$* \beta_{12} = \beta_{21} = c\beta$ ($c < 1$)

$\Rightarrow [\beta] = \begin{pmatrix} \beta_1 & c\beta \\ c\beta & \beta_2 \end{pmatrix}$ avec $\beta_{12}^2 < \beta_1 \beta_2$

Random force : $x_{12} = 2\beta_1 S(t)$

$= 2\beta_{12} T S(t)$