



$u_1, u_2, \dots = \alpha_n, \alpha_{n+1}, \dots$
 $u_1 + u_2 + u_3 + \dots$ converges
 $\alpha_n u_n$ decays
 λ_n converges $\rightarrow \infty$
 $\alpha_n (\lambda_{n+1} - \lambda_n) < l$

$x=0$
 $y = R \sin(\omega)$
 $z = R \cos(\omega)$

$$\frac{dx}{ds} = 1 - \frac{R}{\rho} \cos(\omega)$$

$$\frac{dy}{ds} = R \omega' \cos(\omega) - \frac{R}{\rho} \sin(\omega) = R \left(\omega' - \frac{1}{\rho} \right) \cos(\omega)$$

$$\frac{dz}{ds} = -R \omega' \sin(\omega) + \frac{R}{\rho} \cos(\omega) = -R \left(\omega' - \frac{1}{\rho} \right) \sin(\omega)$$

$$\frac{ds_1}{ds} = \sqrt{\left(1 - \frac{R}{\rho} \cos(\omega)\right)^2 + R^2 \left(\omega' - \frac{1}{\rho}\right)^2}$$

$$\lim_{n \rightarrow \infty} \alpha_n u_n = 0$$

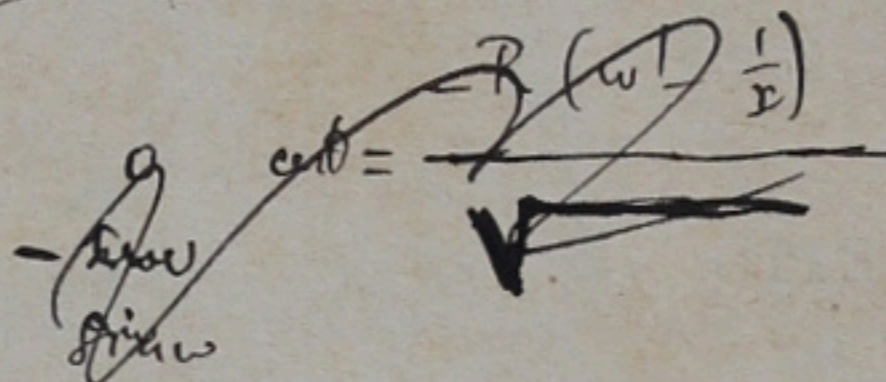
$$\alpha_n = \frac{1}{v_n}$$

$$\lambda_{n+1} = v_1 + v_2 + \dots + v_n$$

$$a = \frac{1 - \frac{R}{\rho} \cos(\omega)}{\sqrt{\dots}}$$

$$b = \frac{R \left(\omega' - \frac{1}{\rho}\right) \cos(\omega)}{\sqrt{\dots}}$$

$$c = \frac{-R \left(\omega' - \frac{1}{\rho}\right) \sin(\omega)}{\sqrt{\dots}}$$



Capelli - 12.
 - Montan.
 - Corrub.

$$1 - \frac{R}{\rho} \cos(\omega) = \frac{ds_1}{ds} \sin(\theta)$$

$$R \left(\omega' - \frac{1}{\rho}\right) = \frac{ds_1}{ds} \cos(\theta)$$

Thomson - N.P.
 - Annual Rep. 1882.

$$\begin{cases} a = \sin(\theta) \\ b = \cos(\theta) \cos(\omega) \\ c = -\cos(\theta) \sin(\omega) \end{cases}$$

$$\frac{da}{ds} = \theta' \cos(\theta) + \frac{\cos(\theta)}{\rho} \sin(\omega)$$

$$\frac{db}{ds} = \theta' \sin(\theta) \cos(\omega) - \left(\omega' - \frac{1}{\rho}\right) \cos(\theta) \sin(\omega) + \frac{\sin(\theta)}{\rho} \cos(\omega)$$

$$\frac{dc}{ds} = \theta' \sin(\theta) \sin(\omega) - \left(\omega' - \frac{1}{\rho}\right) \cos(\theta) \cos(\omega) + \frac{\sin(\theta)}{\rho} \sin(\omega)$$

$$\frac{d^2 \epsilon_1}{ds^2} = \theta'^2 + 2 \frac{\theta'}{\rho} \sin(\omega) \cos(\theta) + \frac{\cos(\theta)}{\rho^2} \sin^2(\omega) + \frac{\sin(\theta)}{\rho^2} \cos^2(\omega) + \left(\omega' - \frac{1}{\rho}\right)^2 \cos^2(\theta) + 2 \frac{\sin(\theta)}{\rho} \left[\dots - \left(\omega' - \frac{1}{\rho}\right) \cos(\theta) \cos(\omega) \right]$$