

TESIT - 1.DZ

Induktivitet: L_{ab}^{RS}

RS
LOR

$$1) \Phi_{01}^S = \Theta^S \sin\left(\mu^S - \frac{\pi}{2}\right) = -\Theta^S \cos(\mu^S)$$

$$2) \Phi_{02}^S = -\Theta^S \cos(\mu^S) (1_0 - 1_2 \cos(2\mu^S))$$

$$\Phi_{02}^S = -\Theta^S 1_0 \cos(\mu^S) + \Theta^S 1_2 \cos(\mu^S) \cos(2\mu^S)$$

$$= -\Theta^S 1_0 \cos(\mu^S) + \Theta^S \frac{1_2}{2} (\cancel{\cos(3\mu^S)} + \cos(\mu^S))$$

$$= -\Theta^S 1_0 \cos(\mu^S) + \Theta^S \frac{1_2}{2} \cos(\mu^S)$$

$$= \Theta^S \left[-1_0 + \frac{1_2}{2} \right] \cos(\mu^S) \quad \text{p do THPI}$$

$$3) \Phi_{02}^S = \int_{\mu}^{\pi+\mu} \Theta^S \left[-1_0 + \frac{1_2}{2} \right] \frac{dL}{2p} \cos(\mu^S) d\mu^S$$

$$= \Theta^S \left(-1_0 + \frac{1_2}{2} \right) \frac{dL}{2p} \sin(\mu^S) \Big|_{\mu}^{\pi+\mu}$$

\Downarrow
 $\sin(\pi/\mu) = \sin(\pi/\mu) + \cos(\pi/\mu)$
 $= -\sin(\mu)$

$$= Q^S \left(\lambda_0 + \frac{\lambda_2}{2} \right) \left(\frac{\rho l}{2p} \right) (-\sin \mu^S)$$

$$\frac{2}{\pi} \tau p \cdot l$$

$$= \frac{2}{\pi} \tau p \cdot l \cdot Q^S \left(-\lambda_0 + \frac{\lambda_2}{2} \right) (-\sin \mu^S)$$

$$= \frac{2}{\pi} \tau p \cdot l \cdot Q^S \left(\lambda_0 - \frac{\lambda_2}{2} \right) (\sin \mu^S)$$

$$\psi_{av}^{RS} = \rho_0^S \cdot \omega^R \ln^R \quad \left(Q^S = \frac{2}{\pi} \frac{\omega^S \ln^S}{p} \cos \right)$$

$$\psi_{av}^{RS} = \left(\frac{2}{\pi} \right)^2 \left(\lambda_0 - \frac{\lambda_2}{2} \right) \tau p l \left(\omega^S \ln^S \right) \left(\omega^R \ln^R \right) \lambda_0^S \sin \mu$$

$$\lambda_{av}^{RS} = \left(\frac{2}{\pi} \right)^2 \left(\lambda_0 - \frac{\lambda_2}{2} \right) \tau p l \left(\omega^S \ln^S \right) \left(\omega^R \ln^R \right) \sin \mu$$