ECE 520

ADVANCED ELECTRICAL MACHINERY

SESSION no.  6
\[ k_0 = \text{sinc} \left( \frac{bR}{2} \right) = \frac{\sinh \left( \frac{hR}{2} \right)}{\left( \frac{hR}{2} \right)} \]

distribution factor for a uniformlychg.
Development (by example) of

\[ L'_{XY} = \text{Morlet} \int_{2\pi}^{2\pi} N_x(x) N_y(x) \, dx \]
\[ \phi_{B1} = \int_{\alpha_{B1}'}^{\alpha_{B1}} S_A(x) \frac{\mu_0 R_{left}}{x} \, dx \]

\[ R\phi = N_i \cdot \delta \]

\[ \phi = \frac{\delta}{R} = \frac{\delta}{P} = \frac{\delta \mu_0 A}{l} \]
\[ K_S = \frac{N_0 + L}{2} \]

\[ \phi_{B1} = \int k_S \frac{3A(x)}{3A(x)} \, dx \]
\[ \phi_{B_1} = \int_{a_1}^{b_1} n(x) A(x) \, dx \]
\[ \phi_{B_1} = k_c \sum_0^{\infty} \int_0^x B_1 \, dx + 0 \]

\[ \sum_0^{\infty} \int_0^x B_1 \, dx \pm B_1 \]

\[ \sum_0^{2\pi} \int_0^x B_1 \, dx \]
\[ \phi_{Bz} = \kappa \int (-1) J_A(x_1) \, dx \]

\[ \phi_{Bz} \]

\[ n_{Bz}(x_1) \quad x_{Bz} \quad \Delta B_{z'} \]
\[ \phi_{32} = \int_{0}^{L} k e \sum_{n} J_{n}(c)(x-c) \, dx \]

\[ \phi_{ji} = \int_{0}^{L} k e \sum_{n} J_{n}(c)(x-c) \, dx \]
\[ \psi_{BA} = \sum_{j=1}^{N_b} \phi_{Bj} \]

Flux directed from \( B \) to \( A \) by current on ring \( n \) in ring \( A \):

\[ \psi_{BA} = K_c \sum_{j=1}^{N_b} \int_{\partial A} n_{Bj} \cdot \hat{\omega} S_A(\omega) d\omega \]
\[
\chi_B^+= \frac{k^3}{\alpha^2} \int_0^{\alpha_r} n_{B}(\alpha) \beta_{B} \beta_{A} \chi_{A}^+ d\alpha
\]

\[
\chi_{A}^+ = N_{A} \chi_{A}^+ + \frac{k^3}{\alpha^2} \int_0^{\alpha_r} n_{B}(\alpha) \beta_{B} \beta_{A} \chi_{A}^+ d\alpha
\]

\[
\chi_B^+ = k^3 \int_0^{\alpha_r} n_{B}(\alpha) \beta_{B} \beta_{A} \chi_{A}^+ d\alpha
\]
\[ L_{BA} = \frac{\gamma_{BA}}{\epsilon_A} \]

\[ L_{BA}^+ = \mu \int_{a}^{x} \left[ n_B(x) N_A(x) \right] dx \]

\[ N_B(x) = n_B(x) - \gamma_B \]
\[ n_B(\alpha) = n_B(\alpha) + <n_B(\alpha) > \]

\[ z_{\alpha} = k_c \int_{0}^{2\pi} n_B(c(t)) d\alpha \]

\[ z_{\alpha} = k_c \int_{0}^{2\pi} n_B(c(t)) d\alpha \]
\[ L_{yx} = Kc \int_{\alpha}^{\beta} N_y(\alpha) N_x(\alpha) d\alpha \]

\[ = Kc \int_{\alpha}^{\beta} N_x(\alpha) N_y(\alpha) d\alpha \]

\[ L_{yx} = L_{xy} \]
\[ L_{BA} = L_{AB} = ? \]
\[ L_{BA} = K_c \frac{N_A N_B}{2} \left[ \frac{\pi}{2} \right] \]

\[ = \frac{K_c N_A N_B}{2} \left[ \frac{5\pi}{6} - \frac{\pi}{4} \right] \]

\[ = \frac{K_c N_A N_B}{2} \frac{\pi}{6} \]