ECE 2300
Recitation Class 5

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Pre-class

- Make-up Lecture on Sunday!
  - We are not meeting in person on Thursday (June 22nd)
  - Make-up Lecture arranged on Sunday original time

- Quiz this week!
  - After Sunday lecture (8:00 pm – 8:40 pm)
  - Same format as last quiz. Online student need to turn on at least one camara.
  - If you want to take online quiz, notify us beforehand!

- Laplace's Equation:

Possible Solutions of $X''(x) + k_x^2 X(x) = 0$

k_x^2	k_x	$X(x)$	Exponential forms† of $X(x)$
0	0	$A_0 x + B_0$	
+	k	$A_1 \sin kx + B_1 \cos kx$	$C_1 e^{jkx} + D_1 e^{-jkx}$
−	jk	$A_2 \sinh kx + B_2 \cosh kx$	$C_2 e^{kx} + D_2 e^{-kx}$

- Current Density:

- Ohm's Law:

- Voltage Law:

- Current Law:

- This is a Law about power and heat generated on (a) resistor(s)

5.2.5 Boundary conditions

- ## Steady current density:
  - ### Differential Form:

  - ### Integral Form:

5.2.5 Boundary conditions

- At the connecting surface of different conductors:
    - Normal:

    - Tangential:

Thank You

Credit to Deng Naihao for this slides & information