Any questions before quiz

Quiz + Team Quiz + Talk through solution

Noise voltage variance on capacitor in RC low-pass filter – kT/C

- Xfer: $v_o/v_i = 1/(RCs+1)$
- $S_v^2 = 4kTRdF$, in series w/ resistor
- $v_o^2 = 4kTR*\int_0^{\inf}(1/(RCs+1))\, df$
- Integral is $1/4RC$ (generally $1/\tau$)
- $v_o^2 = 4kTR / 4RC = kT/C$