



Optical lithography beyond the Heisenberg limit

Dr. Robert McLeod

*ECEE Department, ECEE 1B47, UCB-425
University of Colorado at Boulder*

Optical lithography is the technical foundation of Moore's Law which drives the continual, exponential improvement in information technology. The size of the features that can be created with lithography determines the size, density and speed of electronics. The limit on this size is the Heisenberg positional uncertainty on the photons used to transfer the image to the chip, suggesting that it is somewhat fundamental. I will discuss methods under investigation to avoid or circumvent this limit. Particularly I will describe work in our lab that uses a photoresist that responds to two simultaneous laser colors to circumvent the Heisenberg limit.

Location: Ross 0220 (Ground level of Ross Hall)
(Refreshments will be served at 3:20pm.)

Physics/EPS/NHS/UNC
ruwang.sung@unco.edu 970-351-2961
<http://www.unco.edu/nhs/physics/>