

Abstract for an Invited Paper
for the MAR07 Meeting of
The American Physical Society

Excited states and electro-optics of carbon nanotubes¹

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We will discuss experimental and theoretical results on nanotube excited state production and luminescence through photoexcitation, electron-hole recombination and hot carrier impact excitation. The effects of an external electric field, as well as environmental effects on the absorption and emission spectra will be examined. Finally, nanotube photoconductivity and photovoltage and the role of the substrate and defects on these processes will be analyzed.

¹Work in collaboration with J. Chen, M. Freitag, V. Perebeinos, J. Tsang.