

1116-37-2073      **Robert G Niemeyer\*** ([robert.niemeyer@maine.edu](mailto:robert.niemeyer@maine.edu)), 332 Neville Hall, Dept.of Mathematics & Statistics, University of Maine, Orono, Orono, ME 04469. *A fractal perturbation of a nanowire.*

Recent results on the T-fractal billiard are applied to the electron-hole dynamics of a nanowire. We show that a fractal perturbation of a nanowire effectively mimics the cutting of the wire into two pieces. Also introduced in this talk is the notion of Andreev reflection and how an Andreev billiard table cannot have an associated flat surface, in the sense generally understood. (Received September 21, 2015)