

## Shot noise in carbon nanotube devices.

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We report on shot noise measurements in carbon nanotube based devices. In the Fabry-Perot electronic interferometer regime, the noise power spectral density oscillates as a function of the voltage applied to the gate electrode, as a consequence of quantum interferences. The non-interacting quantum shot noise theory accounts for the data quantitatively and allows to determine directly the transmissions of the two channels characterizing the nanotube. In the Kondo regime, strong departures from the non-interacting theory are found. We compare our measurements to recent theoretical predictions for the shot noise of the current flowing through a Kondo impurity.