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Resonant transport in crossed carbon nanotubes

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We report the observation of the resonant transport in multiwall carbon nanotubes in a crossed geometry. The resonant transport is manifested by an asymmetric peak in the differential conductance curve. The observed asymmetric conductance peak is well explained by Fano resonance originating from the scattering at the contact region of the two nanotubes. The conductance peak depends sensitively on the external magnetic field and exhibits Aharonov-Bohm-type oscillation.