



Resistance of pn- junctions in strongly correlated armchair nanotubes

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I will discuss low temperature magnetoresistance of a pn-junction in an armchair carbon nanotube. Strong Luttinger correlations of electron liquid in armchair tubes have a dramatic influence on the temperature dependence of the resistance of this device. At zero magnetic field single electron back-scattering at the pn-junction is absent, and the resistance is dominated by two-particle back-scattering processes.