

SEMINÁŘ OTF ÚJF, ŘEŽ

VÍT JAKUBSKÝ

(ÚJF AV ČR, Řež)

**Supersymmetries of the spin-1/2 particle
in the field of magnetic vortex**

Abstrakt

We will consider a simple quantum model of the planar electron which is moving in presence of an infinitely thin solenoid. Despite the absence of the magnetic field, the dynamics is influenced by the presence of non-zero electromagnetic potential. We will analyze the rich algebraic background of the model and show that it consists of several representations of superconformal symmetry. We will discuss an alternative interpretation of the results in terms of anyons.

**Seminář se koná v pátek 11. 6. 2010 v 10:30 hod.
v zasedací místnosti ÚJF Řež**

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