Dynamics of strongly correlated bosons in magnetic fields

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Neutral bosons loaded in an optical lattice open a new window for manipulating of transport phenomena in such systems. Especially, we analytically show, that recently available synthetic magnetic field, could abruptly change optical conductivity. The role of Dirac-like physics is emphasized [1].

References:

[1] A.S. Sajna, T.P. Polak, R. Micnas, Phys. Rev. A, 89, 023631 (2014)