Realization of chiral edge transport in a rotating Bose gas

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In this talk, I will present recent results from MIT along two fronts regarding impurity physics. In the first, we demonstrate robust flow around an obstacle of a propagating edge mode in a quantum fluid subject to an artificial gauge field. In the second, I will present a new platform for the realization of a quantum degenerate mixture of erbium and lithium atoms, featuring a very large mass ratio, tunable inter- and intraspecies interactions, and free choice of quantum statistics. This platform recently came online, producing a dual BEC of these two elements.