# Chiral quantum Hall Josephson junctions

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**Abstract**

In this talk I will present our recent results on quantum Hall Josephson junctions. I will show that with suitably designed junctions, a supercurrent can develop around filling factor 2 and withstand up to 8 teslas. I will also report on the chiral nature of the supercurrent, indicating that a mixture of electron-hole pairs co-propagate at the periphery of the sample via the quantum Hall edge channels. The key parameters that limit the supercurrent in the quantum Hall regime will be also discussed.

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