

# **Anyonic statistics revealed by the Hong-Ou-Mandel dip for fractional excitations**

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The fractional Quantum Hall effect (FQHE) is known to host anyons, quasiparticles with a statistics which is intermediate between bosonic and fermionic. We show here that Hong-Ou-Mandel (HOM) interferences between excitations created by narrow voltage pulses on the edge states of a FQHE system at low temperature show a direct signature of anyonic statistics. The width of the HOM dip is universally fixed by the thermal length scale, independently of the intrinsic width of the excited fractional wavepackets. This universal width can be related to braiding of the incoming excitations with thermal fluctuations created at the quantum point contact. We show that this effect could be observed with periodic trains of narrow voltage pulses using current experimental techniques.