

A new Chromium-Lithium experiment

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The authors present here PoLiChroM, a newly created experimental platform for the production of a novel ultracold mixture of fermionic atoms of Chromium 53 and Lithium 6, with which to investigate two paradigmatic but antithetic manifestations of strong interaction among fermions: exotic superfluidity, which arises in presence of attractive interactions that pair up fermions with opposite spins, and ferromagnetism, which instead requires these interactions to be strongly repulsive. The authors also report on the current status of the experiment, showing preliminary results on the newly produced magneto-optically trapped gases.

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