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Spin imbalance in 1D trapped attractive Fermi atoms: T>0 quantum Monte Carlo results CHANGMO YANG, D.M. CEPERLEY, Univ of Illinois - Urbana — Spin imbalance in a one-dimensional system of fermions with short-ranged attractive interactions is studied with continuous-space path-integral Monte Carlo simulation. Following closely the experiment with ^{6}Li atoms [1], the pair momentum distribution is calculated at various spin polarizations. FFLO-type pairing is confirmed at the experimental temperature and coupling strength. We compare our results to those of other numerical methods [2-4] and discuss the prospects for experimental detection.

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