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Pion condensation at non-zero isospin chemical potential with Wilson fermions

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In contrast to the case of non-zero baryon chemical potential, the isospin chemical potential does not introduce a sign problem and can be simulated on the lattice. When the isospin chemical potential is large enough, a phase transition to a Bose-Einstein condensate of pions takes place. Currently available results in the literature on the phase diagram and the equation of state in this setup employ staggered fermions. We present preliminary results on the onset of the pion condensation phase in simulations with Wilson fermions.

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