Title: Dynamic fluctuations in systems with broken time-reversal symmetry and centre-ofmass conservation

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Abstract: We characterize steady-state static and dynamic properties in a broad class of mass transport processes on a periodic lattice, where both mass and center-of-mass (CoM) remain conserved and detailed balance is violated in the bulk. Using a microscopic approach, we exactly determine the decay (or, growth) exponents for various dynamic and static correlation functions in these systems. We show that, despite constrained dynamics due to the CoM conservation (CoMC), the density relaxation is indeed diffusive. However, fluctuation properties are strikingly different from that in the diffusive systems with a single (mass) conservation law. Indeed, both dynamic and static fluctuations are anomalously suppressed, resulting in an extreme form of *hyperuniformity* in the systems.