

Christof Sparber and **Peter Markowich**

Title. On Wigner and Bohmian Measures

Abstract. We consider the time-evolution of quantum particles described by the linear Schrödinger equation in a semi-classical scaling. We will report on recent results on so-called Bohmian measures and their classical limit. Bohmian measures describe the time-evolution of the quantum mechanical position and velocity densities and are given by the push-forward under the Bohmian flow on phase space. The latter can be seen as a perturbation of the classical Hamiltonian flow. Connections to the, by now, classical theory of Wigner measures are also discussed.