

We consider particle system with mean field interaction and the problem of uniform in time propagation of chaos. We will describe two approaches, one probabilistic by essence using coupling techniques to prove uniform in time propagation of chaos when confinement or interaction potentials are non uniformly strictly convex. The second one, relying on recent work by Jabin-Wang and a new logarithmic Sobolev inequality, enables us to consider the vortex 2D case.