Propagation of chaos for particles approximations of Vlasov equations with singular forces

Maxime Hauray (LATP), Pierre-Emmanuel Jabin (INRIA Sophia Antipolis / INRIA Lorraine / IECN, JAD)

(Submitted on 19 Jul 2011 (v1), last revised 22 Feb 2012 (this version, v4))

We obtain the mean field limit and the propagation of chaos for a system of particles interacting with a singular interaction force of the type $1/|x|^\alpha$, with $\alpha <1$ in dimension $d \geq 3$. We also provides results for forces with singularity up to $\alpha < d-1$ but with large enough cut-off. This last result thus almost includes the most interesting case of Coulombian or gravitationnal interaction.

Subjects: **Analysis of PDEs (math.AP)**
Cite as: **arXiv:1107.3821 [math.AP]**
(or **arXiv:1107.3821v4 [math.AP]** for this version)

Submission history

From: Maxime Hauray [view email]
[v1] Tue, 19 Jul 2011 19:40:42 GMT (59kb,D)
[v2] Mon, 22 Aug 2011 19:20:42 GMT (59kb,D)
[v3] Wed, 26 Oct 2011 07:21:52 GMT (59kb,D)
[v4] Wed, 22 Feb 2012 12:46:24 GMT (63kb,D)

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