

The Schauder estimate for kinetic integral equations

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Abstract:

Motivated by the study of the Boltzmann equation, we consider a class of linear kinetic equations with integral diffusions. After making precise the adequate counterpart of the usual Hölder continuity assumptions on the coefficients, we derive an estimate of Schauder type for the solutions of these equations, that is to say an estimate of the solutions in a "higher order" Hölder space.

This is a joint work with L. Silvestre.