

Schauder estimates for kinetic equations

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This talk is concerned with Schauder estimates for kinetic equations with either integral or local diffusions. A Schauder estimate relates a higher order Hölder norm with the Hölder norm of the right hand side of the equation under the assumption that the coefficients are also Hölder continuous. After presenting the proper Hölder spaces to work with, we will review two Schauder estimates, one for local equations and one for integral diffusions. Joint works with C. Mouhot (Cambridge) and L. Silvestre (Chicago).

References

- [1] CYRIL IMBERT AND LUIS SILVESTRE, *The Schauder estimate for kinetic integral equations*, arxiv 1812.11870
- [2] CYRIL IMBERT AND CLÉMENT MOUHOT, *A toy nonlinear model in kinetic theory*, arxiv 1801.07891