北京理工大學

数学与统计学院学术报告

Green Function of the Linearized Non-Cutoff Boltzmann Equation and Applications to Well-Posedness in Critical Data

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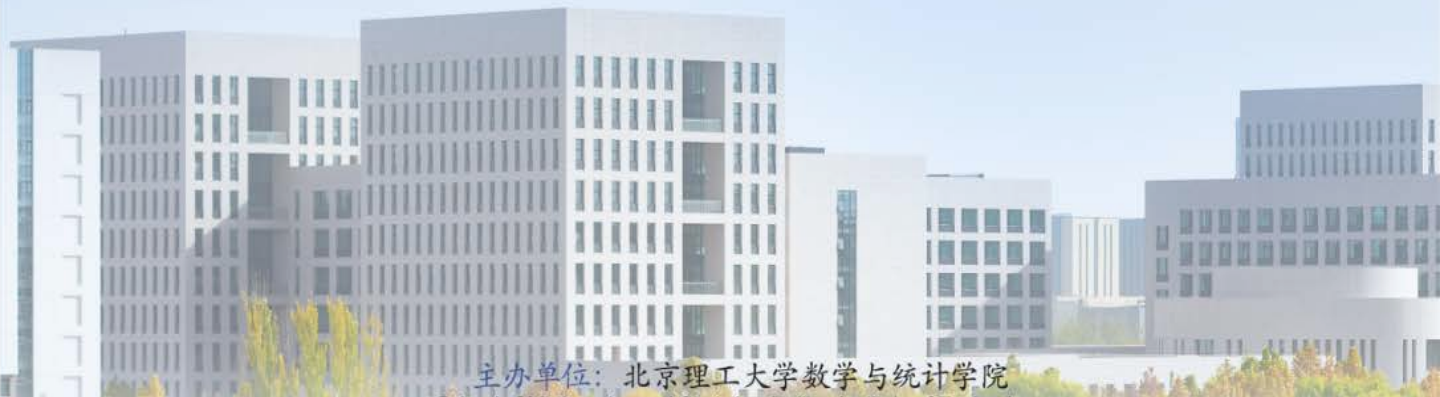
时　间： 2025年9月17日10:00-11:00

地　点： 文萃楼E1008

摘　要： In this talk, we investigate the Green function of the linearized non-cutoff Boltzmann equation. By employing the method of frozen coefficients, we derive kernel estimates through a connection with the well-known Green function estimates for the linear fractional Fokker–Planck equation established by Hou and Zhang (arXiv:2410.18614). Whereas their approach is based on probabilistic techniques, we provide a new proof of the upper bound estimate using Fourier analysis. We then demonstrate how these Green function estimates can be applied to obtain the first well-posedness result for the non-cutoff Boltzmann equation with critical data.



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