

## **abstract**

MATHEMATICAL PHYSICS SEMINAR

Topic:

Speaker:

Affiliation:

Date:

Time/Room:

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The Balescu-Lenard equation from kinetic theory--which was earlier derived in a more complicated form by Bogoliubov--is widely considered to include a highly accurate correction to Landau's fundamental model for grazing collisions. So far this equation has seen very little mathematical study. We perform an extensive linearized analysis of this equation near Maxwellian, which includes determining the asymptotic behavior of the new components of the linearized operator and establishing time decay rates for solutions. Comparisons will be made between the two models, and research perspectives discussed if time permits.