

Collision operator of Boltzmann equation

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Abstract: In this talk, we will discuss some fundamental issues of the collision operator of the Boltzmann equation. We should review the derivation of collision kernel first. Then we discuss the issues occurring in the classical derivation of collision kernel for the long range potential and some answers to these issues. If time allowed, we will also present some progress in understating of smoothing effect of the collision operator for the hard sphere model.