

Abstract:

We consider the diffuse reflection boundary problem for linearized Boltzmann equation for hard sphere potential, cutoff hard potential, or Maxwellian molecular gases in a strictly convex bounded domain. We obtain a pointwise estimate for the derivative of the solution provided the boundary temperature is differentiable and the solution is bounded. This talk is based on the joint work with Chun-Hsiung Hsia and Daisuke Kawagoe.