

# Some applications of symmetry relations for the steady/unsteady linearized Boltzmann equation

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Abstract:

We will give a review of the symmetry relations for the steady/unsteady linearized Boltzmann equation for a rarefied gas that hold for arbitrary Knudsen numbers.

The talk will include a brief introduction of the concept of the relations, some specific relations that are predicted from the developed theory and their numerical demonstration, and a proposal of an approach to a hard problem by solving an easier adjoint problem by using the symmetry relations.