

Bobylev-Krook-Wu Modes for Multicomponent Gas Mixtures

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Exact invariant solutions of the spatially uniform Boltzmann equations, the so-called Bobylev-Krook-Wu modes, are presented in the explicit form for an arbitrary N -species gas mixture. The corresponding necessary and sufficient conditions imposed on the molecular parameters are formulated. The completeness of the results obtained is supported by the rigorous group analysis of the Boltzmann equations. [S0031-9007(98)06421-7]

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