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## On the Fluctuation Spectrum of Plasma

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### Abstract

The spectrum of electron phase space density fluctuations of a plasma is calculated by a novel method that parallels conventional calculations of the partition function in statistical physics. Expressions for the electric field fluctuations and the closely related form factor agree with existing results. The method clears up ambiguous statements about equipartition and provides a new expression for the spectrum of phase space density fluctuations about stable non-Maxwellian equilibria.

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