**Analytical survey of Jeans instability with strongly coupled magnetized quantum plasma**

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**Abstract:**

The present paper aims to study Jeans instability of strongly coupled plasma (SCP) with the company of the magnetic field under the impact of quantum correction and rotation. The hyperbolic magneto-hydrodynamic (HMHD) equation of the problem is stated. A desired dispersion relation is driven with the support of a linearized perturbation equation using normal method techniques. The general distribution shows the combined effect of all the parameters which are considered in our problem. The desire dispersion relation is decreased for different modes of waves. We discover that the Jeans condition remains authentic but the appearance of the Jeans criteria is modified. The magnetic field affects the Jeans wave length in only the transverse mode of propagation but doesn’t affect Jeans criteria in the longitudinal mode of propagation. The Jeans criteria are modified by the quantum correction when the alliance of rotation is parallel to the magnetic field