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To Cyclotron Maser Instability Title:

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The present thesis work is motivated by the detection of MCVs in 2018. Radiation detected from them was circularly polarized, had narrowbandwidth, had very Abstract: high brightness temperature. Such radiation profile can be explained using the model of cyclotron maser instability. Present thesis work is an attempt to

understand cyclotron maser in the context of MCVs. A novel Approach to obtain angular and spectral profile of the radiation from an accelerated particle using Maxwell's equations on curved space time is discussed. Vlasov equation and a variant of H theorem for collisionless plasma are independently derived.

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