

Fundamental role of Saturn's magnetosphere in the origin of visible dense rings and the nature of repulsion force between ice bodies in it, predicted by J. Maxwell, 1856

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Participants of Cassini mission to Saturn (2004-2017) concluded there is no yet explanation of the origin of visible dense rings [1–4]. Such as origin of stable three-dimensional disk at equator, their fine structure and separation of ice bodies in the rings. We take into account diamagnetism of ice of dense rings [5] and solved problems by mutual action of gravity and magnetic field on ice bodies in the protoplanetary cloud of Saturn [6]. For the first time we determined diamagnetic nature of repulsion force of ice bodies of visible dense rings, predicted by Maxwell, 1856 [7, 8].

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