

Abstract Submitted
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Equations for the Origin of Stellar and Planetary Rotations

STEWART BREKKE, Northeastern Illinois University (former grad student) — Prior to stellar formation dense stellar cores of hydrogen gas with rotational momentum of $I\omega_{core}$ were orbited by partial rings of hydrogen gas which were in motion with angular momentum of mvr . As gravitational attraction of the rings occurred, the rings of gas decayed and tangentially collided and attached to the stellar cores transferring their angular momentum to the already rotating stellar cores creating final rotation. The equation for this final rotation is $m_1v_1r_1 + m_2r_2v_2 + m_nv_nr_n + I\omega_{stellarcore} = I\omega_{star}$. Planetary formation began with rotating planetary cores of rotational momentum $I\omega_{planetarycore}$. These cores were orbited by molten partial rings of compounds such as silicates, carbonates etc which decayed due to gravitational attraction. These rings had orbital angular momentum mvr . The decaying rings attached to the planetary cores tangentially transferring their angular momentum and mass to the cores creating a final planetary rotation of $m_1v_1r_1 + m_2v_2r_2 + m_nv_nr_n + I\omega_{planetarycore} = I\omega_{planet}$.

Stewart Brekke
Northeastern Illinois University (former grad student)

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