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Theory for Plasma Rocket Propulsion¹ CROCKETT GRABBE, SeaLane Research & Consulting — Electrical propulsion of rockets is developing potentially into the use of 3 different thrusters for future long-distance space missions that primarily involve plasma dynamics. These are the Magnetoplasmadynamic (MPD) Thruster, the Plasma Induction Thruster (PID), and the VASIMIR Thruster. The history of the development of electrical propulsion into these prospects and the current research of particularly the VASIMIR Thruster are reviewed. Theoretical questions that need to be addressed in that development are explored.

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