



About Princeton Satellite Systems

- Wind Turbines
- Two Stage to Orbit Launch Vehicles
- Green buildings
- Scientific Software
- Missile Defense
- Spacecraft Optical Navigation
- Spacecraft Orbit and Attitude Control

Collaboration with PPPL

- Hall Thrusters
- Wind Turbines
- Fusion Propulsion

Hall Thruster

- Segmented Hall Thruster (Fisch, Raitses, PPPL) applicable to a wide variety of space missions
- Investigating optimal trajectories
- Orbit control

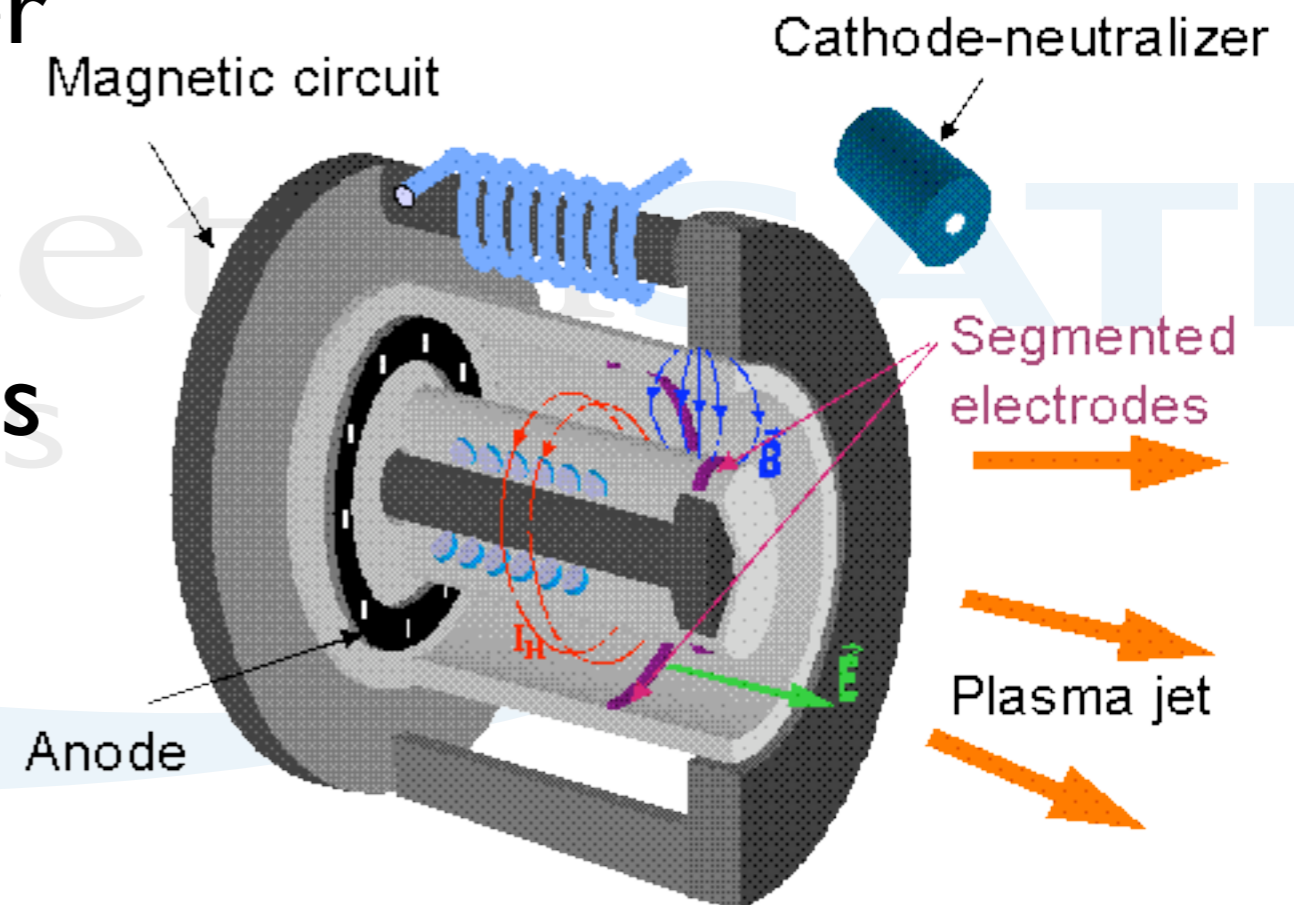


Diagram courtesy PPPL

Vertical Axis Wind Turbine

- Actively controlled wind turbine has the potential for lower per kW cost and greater average power output
- Matrix converter converts 3 phase AC to 1 phase AC for grid interface (Lacenerre, PPPL)
- Currently funded under NSF



Magnetic Fusion Engine

- Manned flight to Mars needs a short flight with an abort option that requires fusion propulsion
- D-T system (Gorelenkov, PPPL) with thin lithium wall uses plasma ripple to produce thrust

