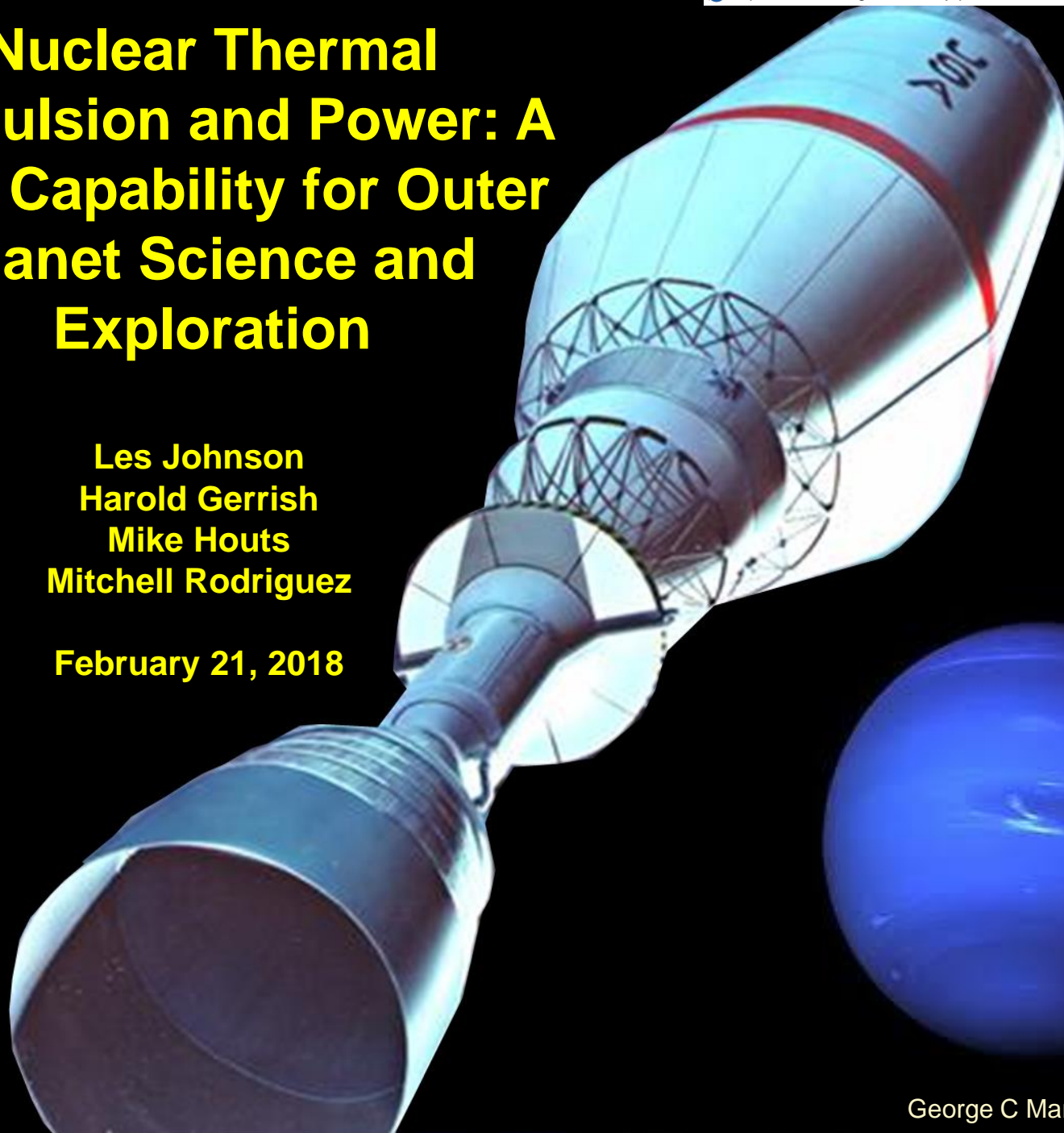




# Nuclear Thermal Propulsion and Power: A New Capability for Outer Planet Science and Exploration

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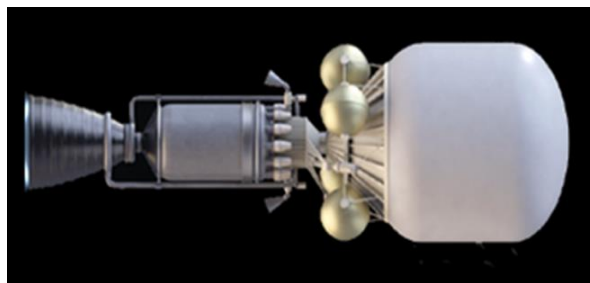




# Why Consider Nuclear Thermal Propulsion?

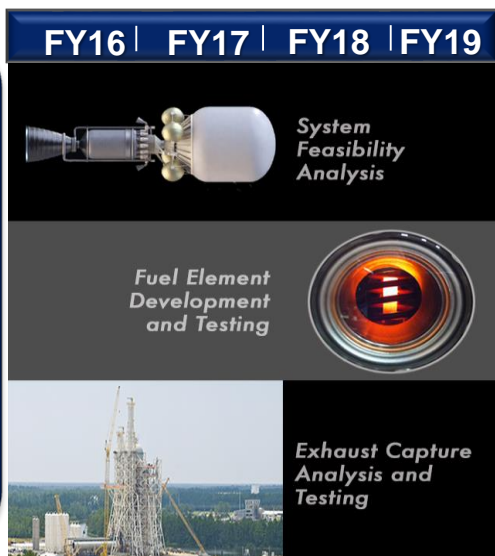


Using nuclear fuel comparable to what powers university class reactors across the USA



- **Metric tonnes** of usable payload **in orbit** around outer planets and moons
- Fast trip times
- Much lower cost than previously estimated from use of Low Enriched Uranium

Goal of on-going NTP project is to determine the feasibility and affordability of a Low Enriched Uranium (LEU)-based NTP engine with solid cost and schedule confidence.



## Possible Future Capabilities

- NTP reactor providing multiple kWe electric power for entire mission
- Using NTP for braking at mission destination using advancements in Cryogenic Fluid Management to increase usable payload mass at the destination
- Other potential users showing interest