



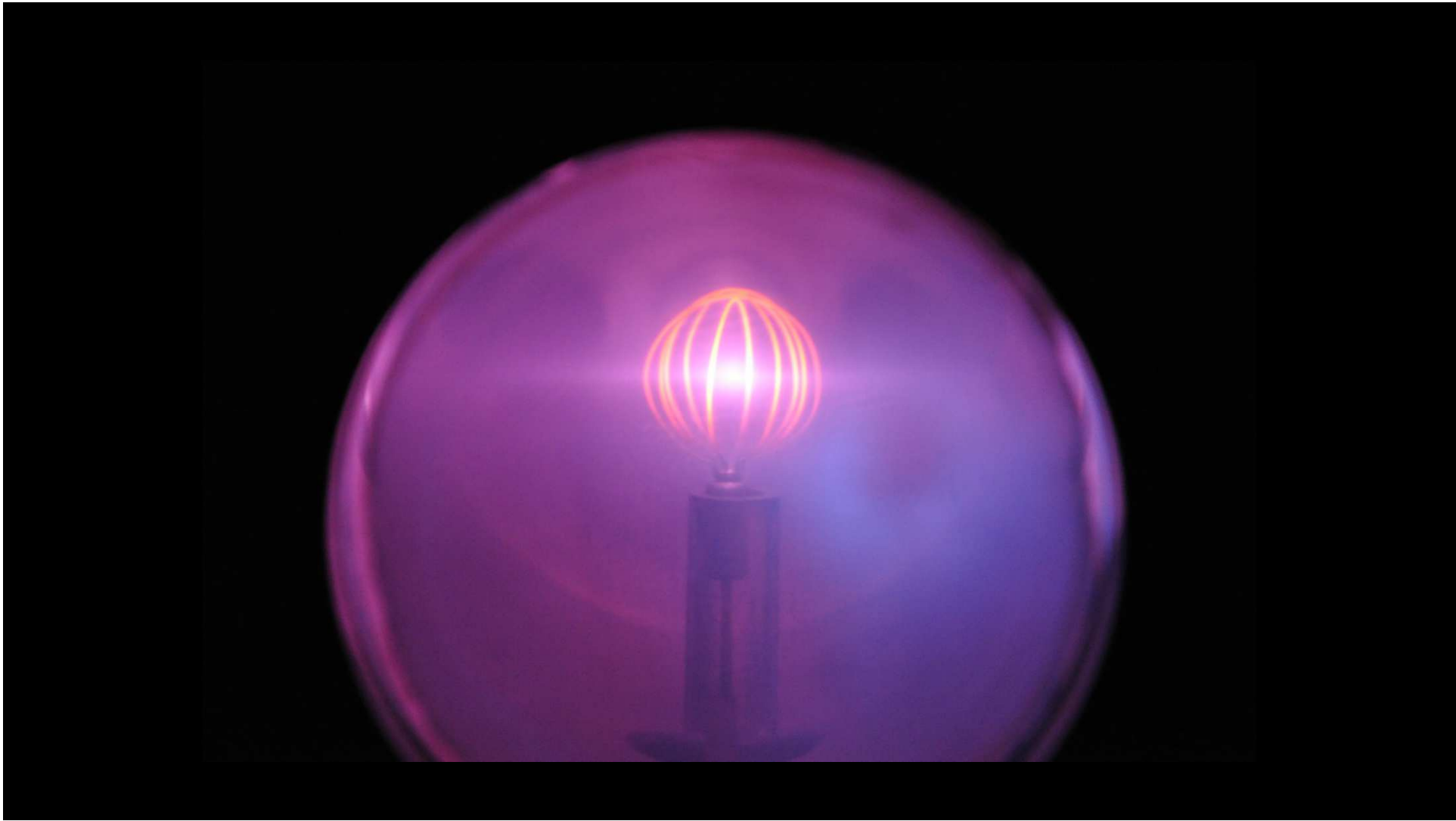
# The Boy Who Played With Fusion

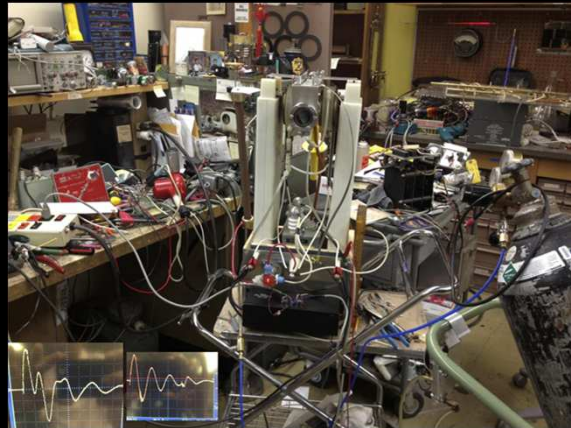
JAIF Annual Conference 2018  
Tokyo, Japan

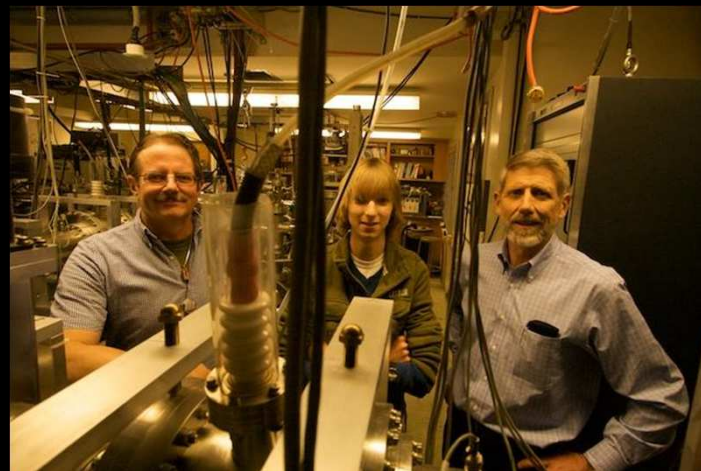
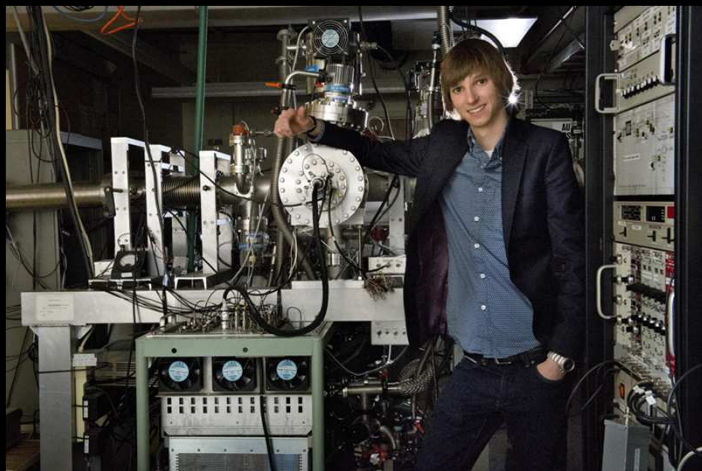
# The Early Years



# The Teenage Years







# Active Research Programs

- Radiobiology
- Radiation Synthesis of Materials
- Space and Planetary Science
- Photonics
- Advanced Materials
- Nanoscale Engineering
- Robotics
- Energy Storage and Transmission
- Isotope Geochemistry
- Arms Control and Nonproliferation



# Nuclear Reactor Development

# Modular Passively Safe Nuclear Battery

## Design Fundamentals

- 0.5 to 50 MWth (Megawatts Thermal)
- Molten Salt Coolants
- High Temperature Ceramic Core Construction
- Heat Transfer via NaK Heat Pipes
- Advanced Ceramic Fuel Form

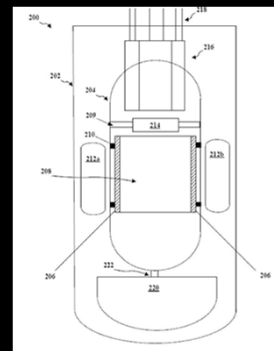
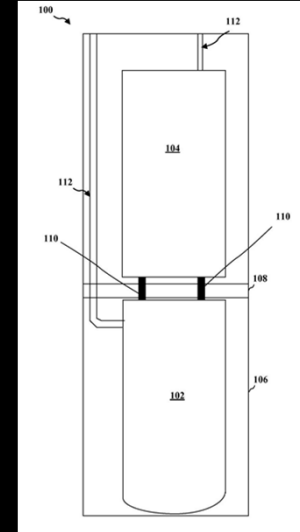
## Development Approach

Advanced  
Simulation and  
Modeling

MPSNB

Rapid  
Iterative  
R&D

Advanced Materials and  
Manufacturing Techniques



# Nuclear for Space Applications

