

Fluid/Gas Dynamics, Plasma Science and Engineering

Fluid/Gas Dynamics

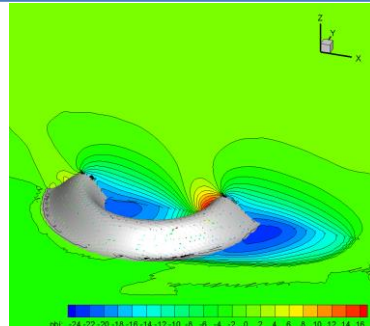
- Computational Fluid Dynamics (CFD) and Direct-Simulation Monte Carlo (DSMC) modeling of gases
- First-principle-based particle simulation algorithms for complex fluid problems

Plasma Science and Engineering

- High-fidelity kinetic modeling of plasmas
- Ground laboratory investigations of plasma phenomena for both ground and space applications – from advanced manufacturing to lunar surface exploration
- **Cold Atmospheric Plasma (CAP) with bio applications**



- Large vacuum chamber (6-ft diameter, 10-ft long)
- Plasma source(s)
- CPU/GPU supercomputers



Experimentation/Modeling of Space Plasma

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Keywords

- #FluidDynamics, #Plasma, #Space
- #CAP, #Bio

