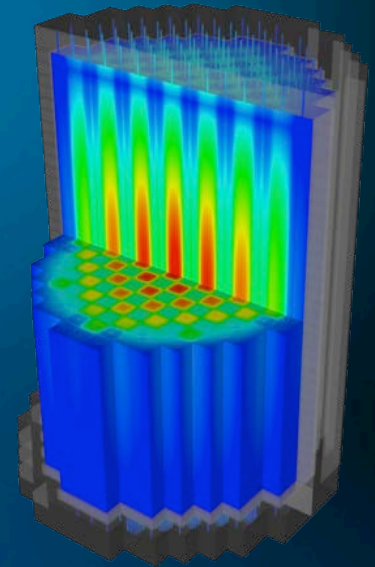


# NUCLEAR ENERGY RD&D OVERVIEW

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[www.inl.gov](http://www.inl.gov)



Advanced Instrumentation  
And Measurement Methods

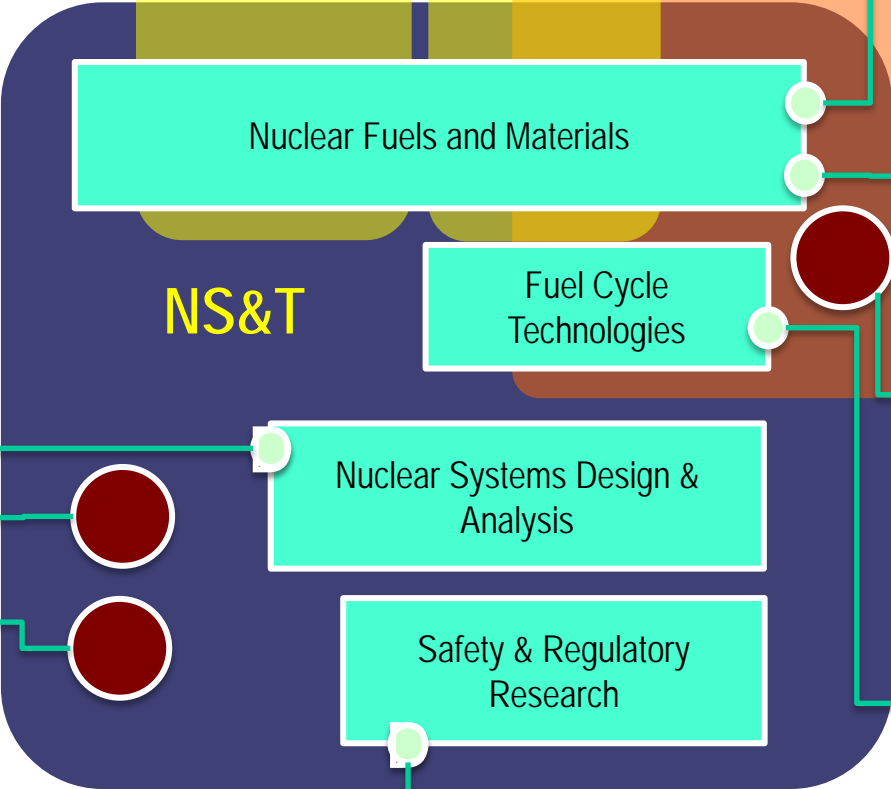
- ✓ Advanced reactor design
  - ✓ HTGR
  - ✓ Micro-reactors
- ✓ SMR support
- ✓ LWR R&D
- ✓ Fast Test Reactor Study
- ✓ Nuclear Hybrid Energy Systems (with EES&T)
- ✓ Systems Analyses
- ✓ Reactor design coupled M&S tools
- ✓ Nuclear cyber (with NHS S&T)

ATR TREAT MFC

- Fuel Science
- ✓ Fabrication
  - ✓ Testing
  - ✓ Characterization
  - ✓ PIE
  - ✓ Multi-scale modeling

Nuclear Fuels and Materials

- Fuel Types
- ✓ ATF
  - ✓ Metallic Fuels
  - ✓ TRISO Fuels



NSUF

GAIN

MOOSE Framework

- ✓ PRA
- ✓ Digital I&C
- ✓ Human Factors
- ✓ Accident analyses methods

- ✓ Radio-chemistry
- ✓ Advanced aqueous flowsheets
- ✓ Pyro-processing
- ✓ Safeguards (jointly with NHS S&T)