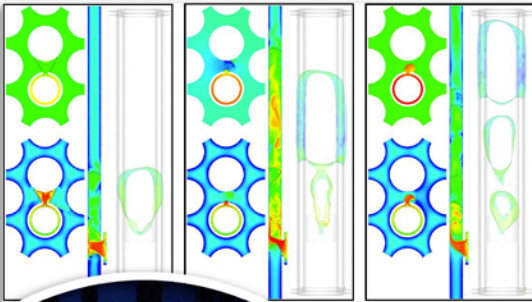velocity Magni
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# North Carolina State University

NCSU has a proven record of working with industry and government to advance research in support of solving nuclear industry challenges.

## Key contributions

- Uncertainty quantification and data assimilation
- Fuel cladding material performance
- Multiphysics coupling
- Fluid dynamics upscaling
- STEM education

## Key outcomes

- Nuclear power plant margin management using best estimate plus uncertainty prediction capability
- Fuel cladding enhanced designs by way of more fundamental understanding
- Multiphysics simulations made possible by computationally efficient algorithms
- Workforce readiness to utilize CASL capabilities developed

## CASL Core Partner

**U.S. DEPARTMENT OF**
## ENERGY
Nuclear Energy