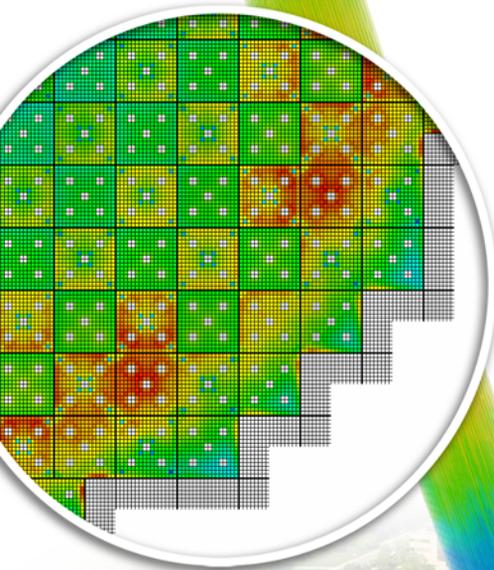
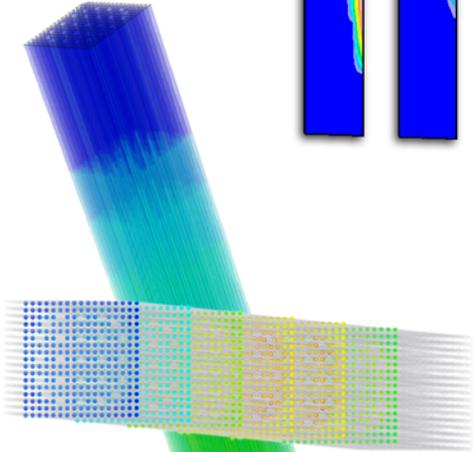
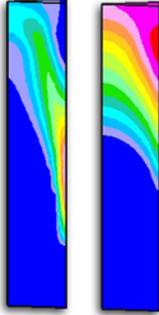


DEBORA



## University of Michigan

The U-M College of Engineering is home to four leading engineering departments that are actively participating in CASL:

- Nuclear Engineering and Radiological Sciences
- Aerospace Engineering
- Materials Science and Engineering
- Mechanical Engineering

### Key contributions

- Computational methods development for radiation transport and coupled multiphysics simulation
- Uncertainty quantification for computational fluid dynamics with adjoint methods
- Analysis of structural and materials response to severe transients
- DeCART: Full-core, pin-resolved, transient neutronics capability with thermal-hydraulic feedback

### Key outcomes

- State-of-the-art hybrid Monte Carlo methodology using Denovo/Shift framework
- Structural analysis of grid-to-rod fretting phenomenon
- Upscaling of microscopic materials models to continuum codes

CASL  
Core Partner

