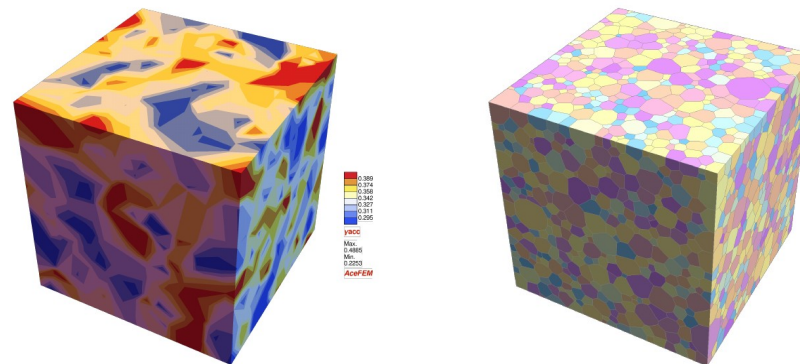


## Homogenization Behavior of a Crystal Plasticity model for hcp materials

Hexagonal closest packed (hcp) materials exhibit anisotropic responses in plastic regimes, when modeled at the microscale, that is at grain-level. Due to the heterogeneous environment in that poly-crystalline aggregate, the overall response might differ to that of a particular grain.

The possible work will include to implement/extend a crystal plasticity model towards consideration of hcp organized lattice structures and its computational homogenization.



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**Requirements:**

Mathematica & AceGen/AceFEM  
Continuum Mechanics & Finite Elements

**Start:**

By arrangement

