

# D-TEC

- AMR Shift Calculus DSL with ROSE/Polyopt
  - **7.9x** for 3D 125 pts stencil
  - **7.3x** for 2D 81 pts stencil
- Halide DSL
  - **4.25x** for MiniGMG
  - **1.8x** on GPU for HPGMG
- Bamboo
  - **1.27x** in 32K size for algebraic multigrid
  - **1.29x** with 96K grid cells for 3D stencil
- LULESH with X10
  - **1.12x** better performance
  - **40%** fewer lines of code
- Global-View Resilience (GVR)
  - **85%** parallel efficiency on 1K processes with less than 2% code change

