

CHAPEL 1.27.0/1.28.0 RELEASE NOTES: PROPOSED PRIORITIES FOR NEXT SIX MONTHS

Chapel Team

June 30, 2022 / September 15, 2022

PROPOSED PRIORITIES FOR THE NEXT SIX MONTHS

- Chapel 2.0
 - Standard module stabilization (primarily)
 - Language stabilization: ranges, parallel-safe collections, first-class functions, class ergonomics
- 'Dyno' Compiler Rework: replace production resolution, start separate compilation effort
- Performance Tuning and Portability: HPE Cray EX, locale per NIC/socket, GPUs, ...
- GPU Support: AMD GPU support, porting and analysis of user kernels and benchmarks
- User Support: Arkouda, CHAMPS, ChplUltra, ChOp, other requests and Q&A from users, ...
- Outreach and growing the user base: talks, CHIUW, social media, blog, papers, how-tos, ...
- Build, Test, Release: reduce triage load and noise
- **LLVM Upgrade:** update to LLVM 15 to keep current

