Proposed Priorities for Chapel 1.17

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Top Priorities

- complete initializers, deprecate constructors
- switch to LLVM-based back-end by default
 - continue to support C-based back-end for quickstart / optional use

improve compilation speed

- create plan for separate compilation / REPL
- GPU support
- more use of / improvements to error-handling
- support users / application studies
- multi-locale performance improvements
- 'mason' package manager improvements



Additional Priorities

library improvements

- particularly in support of apps/users
- support for task-local variables
- further use of / improvements to 'Owned' / 'Shared'
- internal compiler clean-ups / improvements
- optimize away record copies / define steal policies
- close remaining memory leaks
- online Chapel tutorial
- further numa affinity improvements
- better Python interoperability



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