FastMath Collaboration: Exposing PETSc Profiling to External Tools



PETSc has an internal profiling API

- Enabled with "-log_view" argument
- Outputs text summary
- Also has an event trace API

Added PerfStubs calls to PETSc

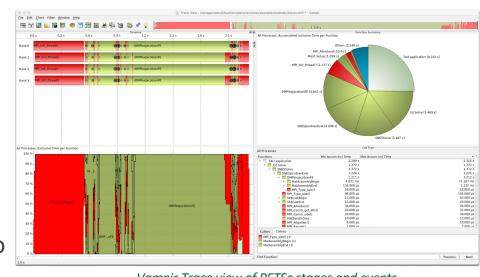
 Enables tool plugin interface with no new build depdency



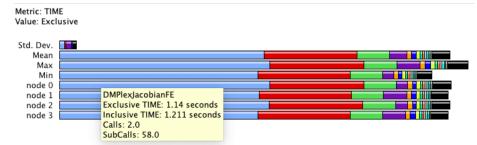
- "tau_exec ./ex56 ..." to preload TAU

Tools now see all PETSc internals

 No additional instrumentation needed



Vampir Trace view of PETSc stages and events



TAU ParaProf profile view of PETSc stages and events





