Chapel: A Condensed Digest

Past: DARPA HPCS-funded research prototype
- Designed from first principles rather than by extension
- supports modern features while avoiding sequential baggage
- NOT SPMD
- global multitasking: more general; suitable for next-gen architectures
- namespace defined by lexical scoping: more natural and intuitive
- Open source and collaborative

Present: Towards production-grade
- Performance improvements and language features
- Next-gen architectures (e.g., massively multithreaded, accelerators)
  - come hear more at the Emerging Technologies Booth (#233)
- New collaborations (e.g., Colorado State, AMD, ETH Zurich)
- Other application areas (e.g., Big Data, interpreted environment)
- Increase user base (e.g., Co-design Centers, universities, industry)

Future: The Chapel Foundation
- An independent entity to oversee the language specification and open source implementation
- Come hear more at the CHUG BoF (5:30-7pm, room 383-84-85)