



Condominium Clusters: A cooperative funding strategy

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Outline

- Overview of Condominium Cluster Idea
- Advantages over uncoordinated approaches
- Specific Challenge to A&M Computing Community



Condominium Cluster Idea

- Administration supports
 - Environmentals
 - System administration
 - Basic and advanced User Support
 - Networking
 - Some cluster nodes
- Faculty PIs provide
 - Nodes of cluster
 - Disk capacity



Advantages over uncoordinated approaches

- more efficient air conditioning
- power conditioning
- professional system administration
- availability of “at least what you contribute”
- likelihood of “more than you contribute”
- integration with other HPC facilities
 - e.g., IVC and MIC



Specific Challenge

- If you bring in dollars for clusters
 - (computing nodes, racks, interconnect)
 - (disk capacity)
- then ...

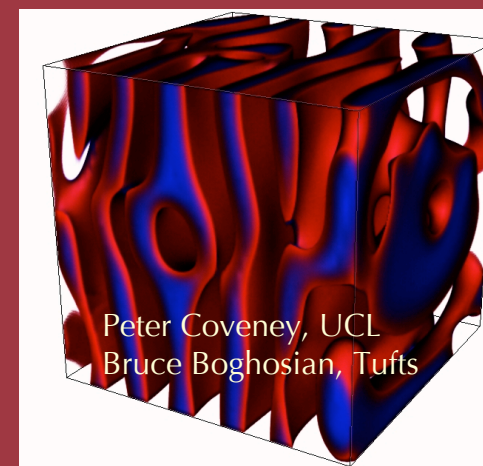
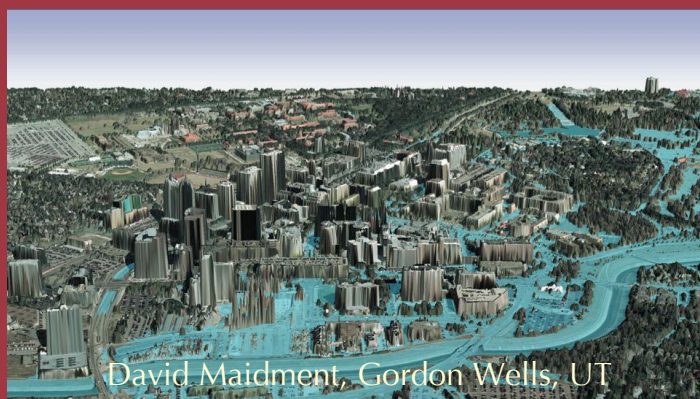
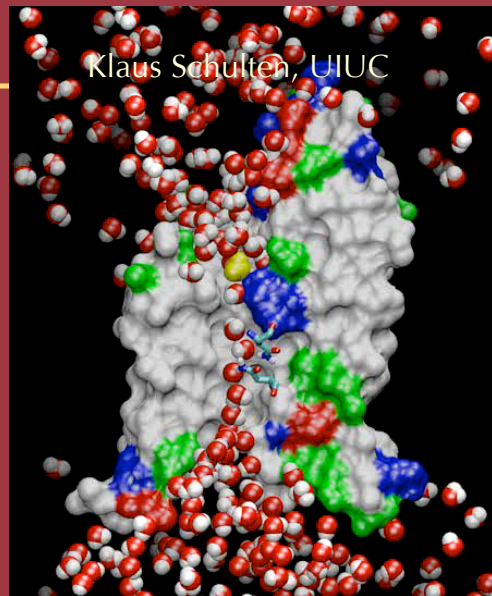
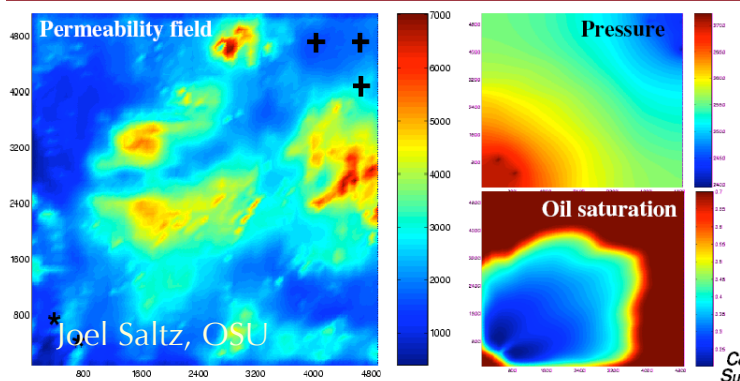


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- then the A&M administration will match this with:
 - professional system administration
 - hardware operations and maintenance
 - basic *and advanced* user support
 - 10 Gb/s networking to research backbone and to
 - other computing, storage, and instruments at A&M
 - wide-area networks via LEARN
 - environmentals
 - machine room space
 - air conditioning
 - power and power conditioning
 - amortized over four years



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- Goal: strengthening Texas A&M University in its research and teaching mission through Computational Science and Engineering





courtesy: Charlie Catlett of NSF's Teragrid

Texas A&M University

