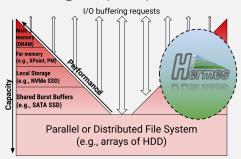
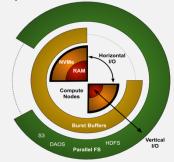


## Framework: Software: NSCI: Collaborative Research: Hermes: Extending the HDF Library to Support Intelligent I/O Buffering for Deep Memory and Storage Hierarchy Systems Xian-He Sun, Illinois Institute of Technology, Elena Pourmal, the HDP Group, Jian Peng, UIUC

## NSF OCI-1835764

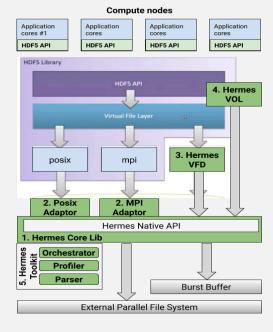
 Hermes is a new distributed I/O buffering software library that abstracts the complexity of managing these multiple hardware technologies (tiers) and aims to boost performance.





- Deep Storage Hierarchy
  - Spans multiple tiers within a node...
  - ...but also multiple nodes in the cluster
- Applications distribute data structures across multiple nodes.
  - Hermes Container Library (available now!)
  - https://github.com/HDFGroup/hcl

## Software Structure



On schedule for first version of the core library by the end of 2020.



