

# Research Activities & Interest

## High-performance storage for HPC

### ■ Efficient I/O

- ▶ Performance analysis methods, tools and benchmarks
- ▶ Optimizing parallel file systems and middleware
- ▶ Modeling of performance and costs
- ▶ Tuning of I/O: Prescribing settings
- ▶ Management of workflows

### ■ Data reduction: compression library, algorithms, methods

### ■ Interfaces: towards domain-specific solutions and novel interfaces

## Other research interests

- Application of big data analytics (e.g., for humanities, medicine)
- Domain-specific languages (for Icosahedral climate models)
- Cost-efficiency for data centers in general