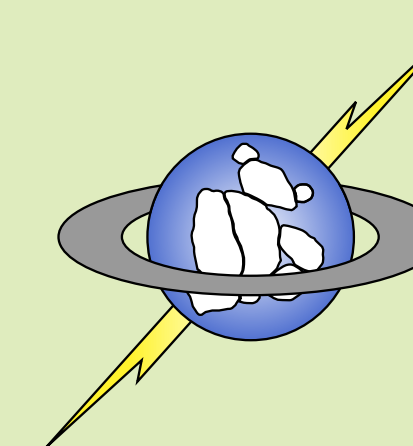


A Peer to Peer, Local Area Disaggregated System

Michael Wei, George Porter, Steven Swanson
UC San Diego



NVSL
Non-volatile Systems Laboratory

Today, we design computer systems as closely coupled physical **aggregates**:

- Computers consist of a processor with memory and I/O in a physical enclosure
- Aggregation leads to fixed-ratio provisioning which results in underutilization

Disaggregation decouples resources from their physical constraints.

In disaggregated systems, applications directly drive resource utilization, increasing efficiency.

However, disaggregated components need to communicate, leading to increased network load.

Architecture

