

Amanda Bullock – Session 3

Title: **Beyond the Deployment: What We Learned Bringing Frontier AI to HPC**

What does it take to deploy a frontier model in a secure, air-gapped HPC environment? Drawing on lessons from our Los Alamos deployment, this talk covers how to build a first-class inference stack for classified workflows, drive adoption through training and enablement, and develop evaluations with the scientific community. We'll discuss when data is "ready enough" for AI, when fine-tuning makes sense versus RAG and agentic tool use, and how early deployment assumptions changed in practice. The core lesson: "commercial parity" is the wrong goal—national labs and frontier labs should partner closely to shape rapidly evolving AI systems together.