

Speaker: Earl Lawrence, LANL

Abstract: URSA is an agentic system developed at Los Alamos National Laboratory for solving scientific tasks. Our approach to agentic AI is designed around the idea that humans are at their best when thinking, asking questions, suggesting solutions, vetoing bad ideas, and understanding results. Agents should do the rest. We also want to develop agents that can take advantage of increasingly powerful AI to answer increasingly abstract questions. We'll present the core elements of URSA which include agents for hypothesizing, planning, simulation management, and general-purpose execution. We will also cover several examples of the system in action including system design, molecular discovery, and complex data analysis.