

# DOE should. . .

- Rec 2-1: Prioritize the hybridization of FMs and traditional modeling.
- Rec 3-1: Study and develop the fusion of AI and human capabilities.
- Rec 3-3: Explore strategies for AI assurance, red teaming, and countermeasures.
- Rec 4-1: Unify dispersed, siloed, and diverse multimodal data sources.
- Rec 4-2: Create interfaces (e.g., agentic, retrieval-augmented generation tools) through which large FMs may easily access these sources.
- Rec 4-3: Design leadership-scale scientific research programs and provide staff with opportunities to rapidly adapt to a quickly evolving technological landscape.
- Rec 5-1: Lead the development of VVUQ frameworks tailored to FMs.
- Rec 5-3: Establish and enforce standardized protocols and develop benchmarks for training, documenting, and reproducing FMs for science.

