



U.S. DEPARTMENT OF  
**ENERGY**

Office of  
Science

# Public Reusable Research (PuRe) Data Resources & Data-Related Funding Opportunities

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FAIR Festival 2021

June 23, 2021

*Margaret R. Lentz, PhD*

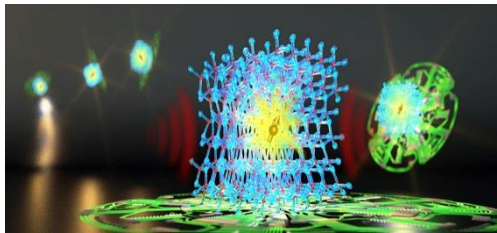
*Program Manager*

*Advanced Scientific Computing Research*

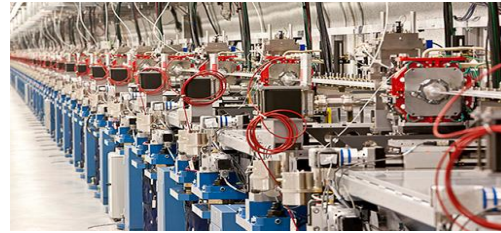
*Department of Energy*

# DOE and Office of Science Mission

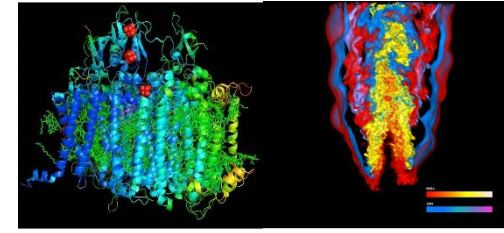
- ▶ **The Mission of the U.S. Department of Energy** is to ensure America's security and prosperity by addressing its energy, environmental and nuclear challenges through transformative science and technology solutions.
- ▶ **DOE Office of Science** is the lead federal agency supporting fundamental scientific research for energy and the largest supporter of basic research in the physical sciences in the United States, fulfilling a Mission to:
  - ▶ Deliver scientific discoveries and major scientific tools to transform our understanding of nature
  - ▶ Advance the energy, economic, and national security of the United States



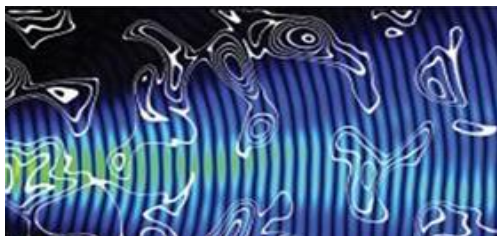
**Advanced Scientific Computing Research**



**Basic Energy Sciences**



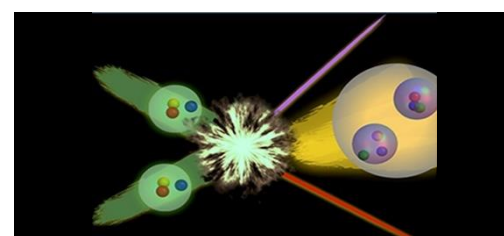
**Biological and Environmental Research**



**Fusion Energy Sciences**

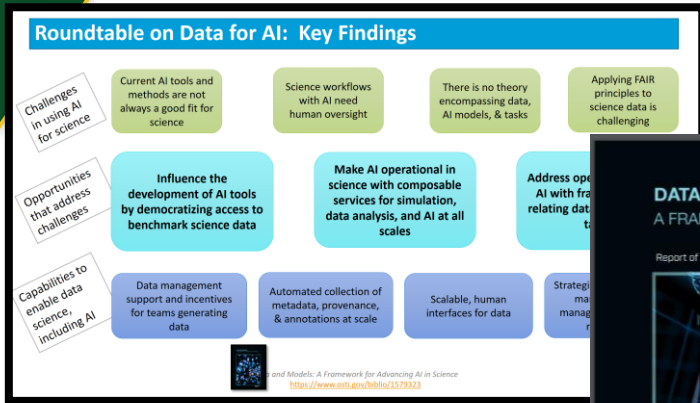


**High Energy Physics**



**Nuclear Physics**

# Data for AI Roundtable

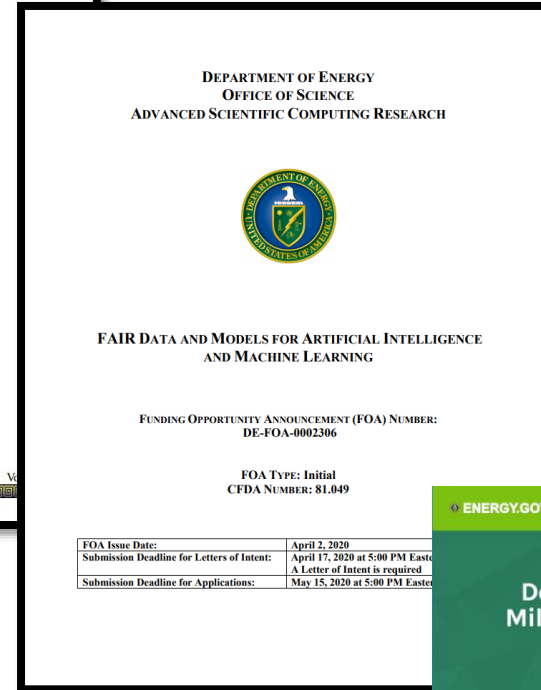
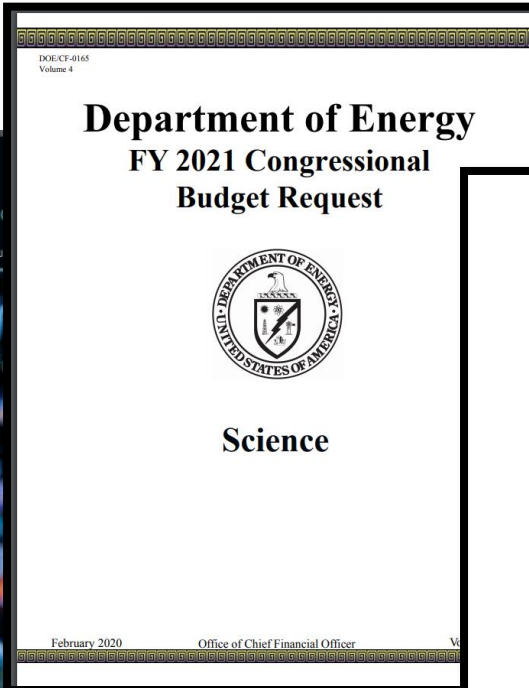


## Focus of the Roundtable:

Enhancing access to high quality and fully traceable research data, models, and computing resources to increase the value of such resources for AI R&D and the SC mission



[Data and Models: A Framework for Advancing AI in Science](#)



[FOA: FAIR Data and Models for AI/ML issued April 2020](#)

[Funded 14 awards across 5 projects, totaling \\$8.5 M in August 2020](#)



June 2019

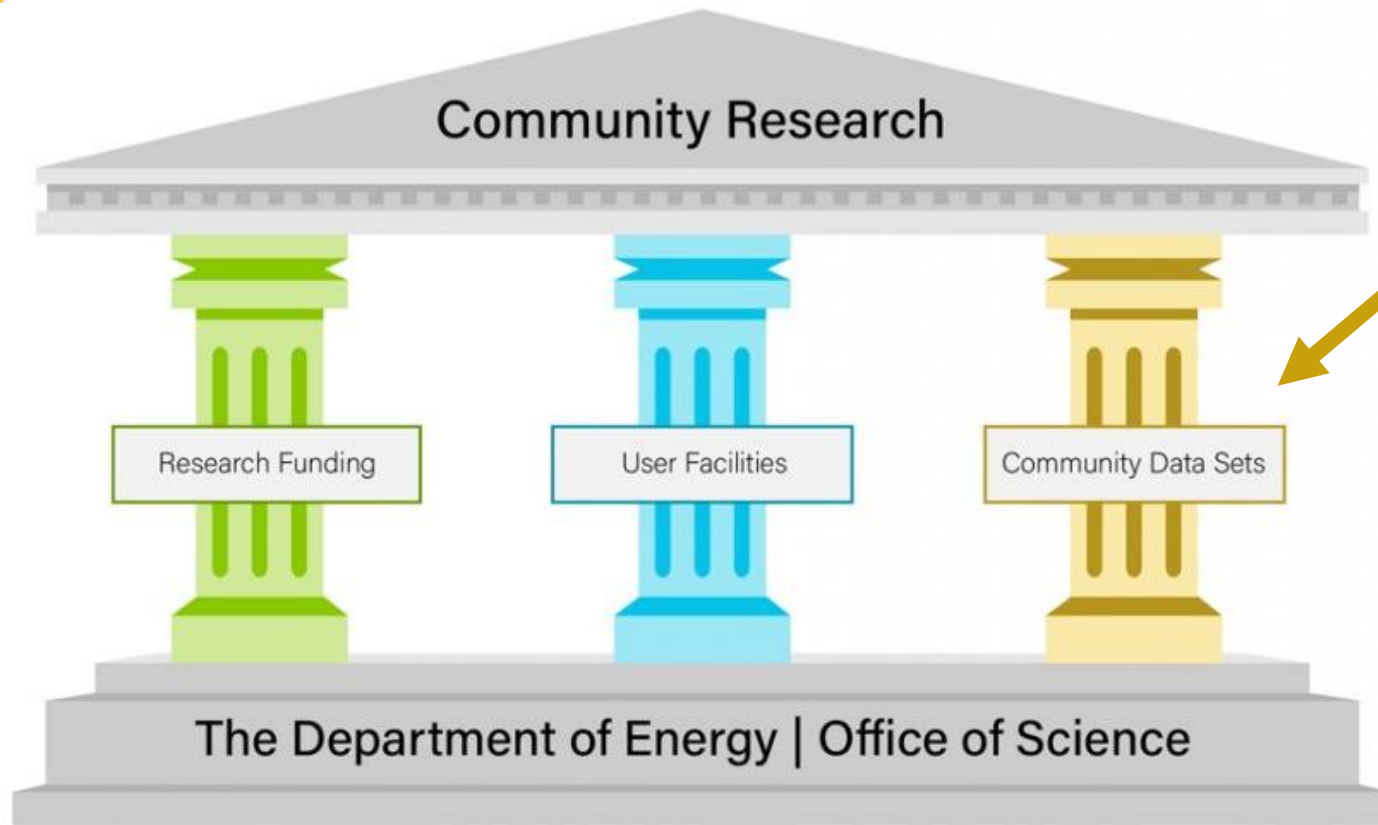
Sep-Dec 2019

February 2020

April 2020

August 2020

# Data is the Third Pillar of the DOE SC Enterprise



## Public Reusable Research (PuRe) Data Resources are:

- data repositories,
- knowledge bases,
- analysis platforms,
- and other activities

that aim to make data **publicly available** in order to advance scientific or technical knowledge.

**PuRe Data Resource** designations **highlight** and **improve stewardship** of SC-supported community data efforts with strategic impact on the SC mission.

<https://www.energy.gov/science/office-science-pure-data-resources>

# PuRe Data Resources at a Glance



<https://science.osti.gov/Initiatives/PuRe-Data/Resources-at-a-Glance>

## ▶ Initially designated resources:

- ▶ Atmospheric Radiation Measurement Data Center
- ▶ Joint Genome Institute
- ▶ Materials Project
- ▶ National Nuclear Data Center
- ▶ Particle Data Group
- ▶ Systems Biology Knowledgebase (KBase)

