#### **Plan Overview**

A Data Management Plan created using DMP Tool

**DMP ID:** <a href="https://doi.org/10.48321/D13892">https://doi.org/10.48321/D13892</a>

**Title:** Copy of FAIR Hackathon Workshop for MPS research communities

**Creator:** Natalie Meyers - **ORCID:** <u>0000-0001-6441-6716</u>

**Affiliation:** University of Notre Dame (UND) (nd.edu)

**Principal Investigator:** Natalie Meyers

Data Manager: Natalie Meyers

**Funder:** National Science Foundation (nsf.gov)

Funding opportunity number: 35584

**Template:** NSF-PHY: Physics

**Project abstract:** 

fooo barrrr

**Last modified:** 07-01-2024

#### **Copyright information:**

The above plan creator(s) have agreed that others may use as much of the text of this plan as they would like in their own plans, and customize it as necessary. You do not need to credit the creator(s) as the source of the language used, but using any of the plan's text does not imply that the creator(s) endorse, or have any relationship to, your project or proposal

## **Copy of FAIR Hackathon Workshop for MPS research communities**

#### **Publication**

Investigators are expected to promptly prepare and submit for publication, with authorship that accurately reflects the contributions of those involved, all significant findings from work conducted under NSF grants. Grantees are expected to permit and encourage such publication by those actually performing that work, unless a grantee intends to publish or disseminate such findings itself.

Publication: The project will produce a final report for the workshop. The reports will be made publically available right after NSF's approval. The workshop project will have its own web site devoted to the workshop, auxiliary information, etc.

## **Data types and privacy**

Investigators are expected to share with other researchers, at no more than incremental cost and within a reasonable time, the primary data, samples, physical collections and other supporting materials created or gathered in the course of work under NSF grants. Grantees are expected to encourage and facilitate such sharing. Privileged or confidential information should be released only in a form that protects the privacy of individuals and subjects involved. General adjustments and, where essential, exceptions to this sharing expectation may be specified by the funding NSF Program or Division/Office for a particular field or discipline to safeguard the rights of individuals and subjects, the validity of results, or the integrity of collections or to accommodate the legitimate interest of investigators. A grantee or investigator also may request a particular adjustment or exception from the cognizant NSF Program Officer.

Data Types and Privacy: The project website will serve as a communication channel with workshop participants and the broader community of interest and be linked to a workshop project space on the open science framework(osf.io) to facilitate sharing of code and examples through github connections during the workshop and its hackathon brekaouts. We will use and encourage participant use of standardized, interchangeable, or open formats to best ensure the long-term usability of data.

# **Access and sharing**

Investigators and grantees are encouraged to share software and inventions created under the grant or otherwise make them or their products widely available and usable.

Access & Sharing: We will share the digital assets created for this workshop with researchers including any outputs gathered or created in the course of work and facilitate access by posting the final report and workshop information on our project website which will be linked to a project page for the workshop on the Open Science Framework.

### Policies and provisions for re-use, re-distribution, derivates

NSF normally allows grantees to retain principal legal rights to intellectual property developed under NSF grants to provide incentives for development and dissemination of inventions, software and publications that can enhance their usefulness, accessibility and upkeep. Such incentives do not, however, reduce the responsibility that investigators and organizations have as members of the scientific and engineering community, to make results, data and collections available to other researchers.

Policies for re-use: We will make the final report and any digital assets created for the workshop available for re-use under a permissive license like Attribution-ShareAlike 4.0 International.

## Plans for archiving and preservation

NSF program management will implement these policies for dissemination and sharing of research results, in ways appropriate to field and circumstances, through the proposal review process; through award negotiations and conditions; and through appropriate support and incentives for data cleanup, documentation, dissemination, storage and the like.

Plans for archiving and preservation: We will deposit a preservation copy of the final report on our institutional repository Curate.ND.edu Notre Dame's institutional repository, which will remain accessible for at least 5 years following completion of the project regardless of whether the PI(s) are still affiliated with the university.

#### Data retention

Physics Division PIs should include in their Data Management Plan those aspects of data retention and sharing that would allow them to respond to a question about a published result. Members of formal collaborations may refer to the collaboration's existing policies and practices.

Data Retention:

Final report will be preserved in Curate.ND.edu for a minimum of five years.

Project website will be served through the

University of Notre Dame's Center for Research Computing (CRC). As a CRC-managed service, the project's website will be protected logistically and physically at the CRC's data center. The project website will be hosted by the CRC as long as required by the community. The PI will utilize also the ND CRC storage resources according to the CRC's published policies. Specific to this project, this includes: the utilization of up to 4TB of redundant distributed (network) storage, nightly offsite backup, and basic web service of data sets residing in said storage. For more information please see: http://crc.nd.edu/index.php/aboutcrc/policies.

Workshop assets stored on osf projexct space are protectex by the COS \$250,000 preservation fund for hosted data in the event that COS has to curtail or close its offices. If activated, the preservation fund will preserve and maintain read access to hosted data. This fund is sufficient for 50+ years of read access hosting at present costs. COS will incorporate growth of the preservation fund as part of its funding model as data storage scales.

For workshop assets on OSF Storage, files are stored in multiple locations and on multiple media types. OSF keeps three types of hashes (MD5, SHA-1, SHA-256) for files. OSF keesp parity archive files to recover from up to 5% bit error. OSF uses **Google Cloud** for active storage and Amazon Glacier as a backup location. File backups are hosted at Glacier, and there are daily backups on Google Cloud for 60 days. The OSF database is backed up via streaming replication 24 hours a day, and incremental restore points are made twice daily. Further, the OSF database is maintained in encrypted snapshots for an additional 60 days. Database backups are verified monthly. Operational data (e.g., config files) for other OSF services are backed up in primary cloud file storage for 60 days. OSF Logs are primarily stored in Google Cloud cold storage indefinitely. In certain cases a third party aggregation service is used for up to 90 days, then backed up to **Amazon S3** indefinitely.