



FAIR DATA IMPLEMENTATION AT NSF MAJOR FACILITIES



CHARLES F. VARDEMAN II¹, DON BROWER¹, JOSE CARDOVA², ANGELA P. MURILLO², EWA DEELMAN³

¹University of Notre Dame, Center for Research Computing, ²Indiana University-Indianapolis, School of Informatics, Computing and Engineering, ³Information Sciences Institute – University of Southern California

CI COMPASS FAIR DATA TWG

The FAIR Data Topical Working Group (TWG) was created in August 2022 in response to feedback from the 2022 CI4MF Workshop in which the MF and greater CI community shared that they are aware of FAIR principles and seek to implement them; however, they find it difficult to determine what exactly is FAIR, how to implement FAIR, and what is required to implement FAIR.

The FAIR Data TWG sets out to:

1. Understand the current practices and needs of FAIR implementation by MFs,
2. Research current and emerging FAIR data practices and implementation,
3. Organize guest speakers regarding FAIR, and
4. Disseminate research regarding FAIR data practices and implementation.

YEAR 1 WORKING GROUP ACTIVITIES

Organize monthly meetings and solicit topics

Research and document considerations for implementing FAIR

Organized guest speakers for FAIR-related webinars

Disseminate research regarding FAIR implementation.

Working group members include CI Compass personnel, MF personnel, and colleagues from the greater CI community.

WANT TO GET INVOLVED? CONTACT US:

- For more information about CI Compass, contact us at contact@ci-compass.org
- To learn more about the CI Compass visit, <https://ci-compass.org/>

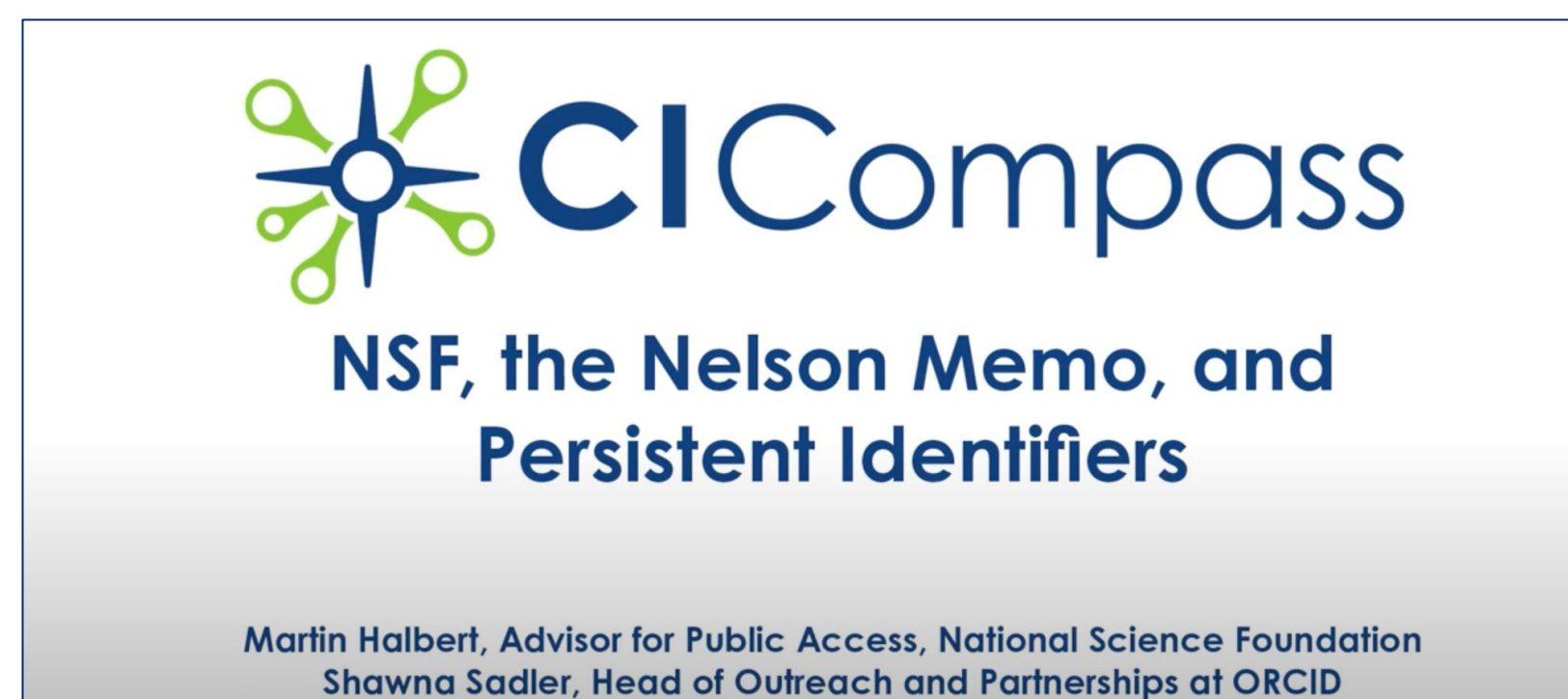
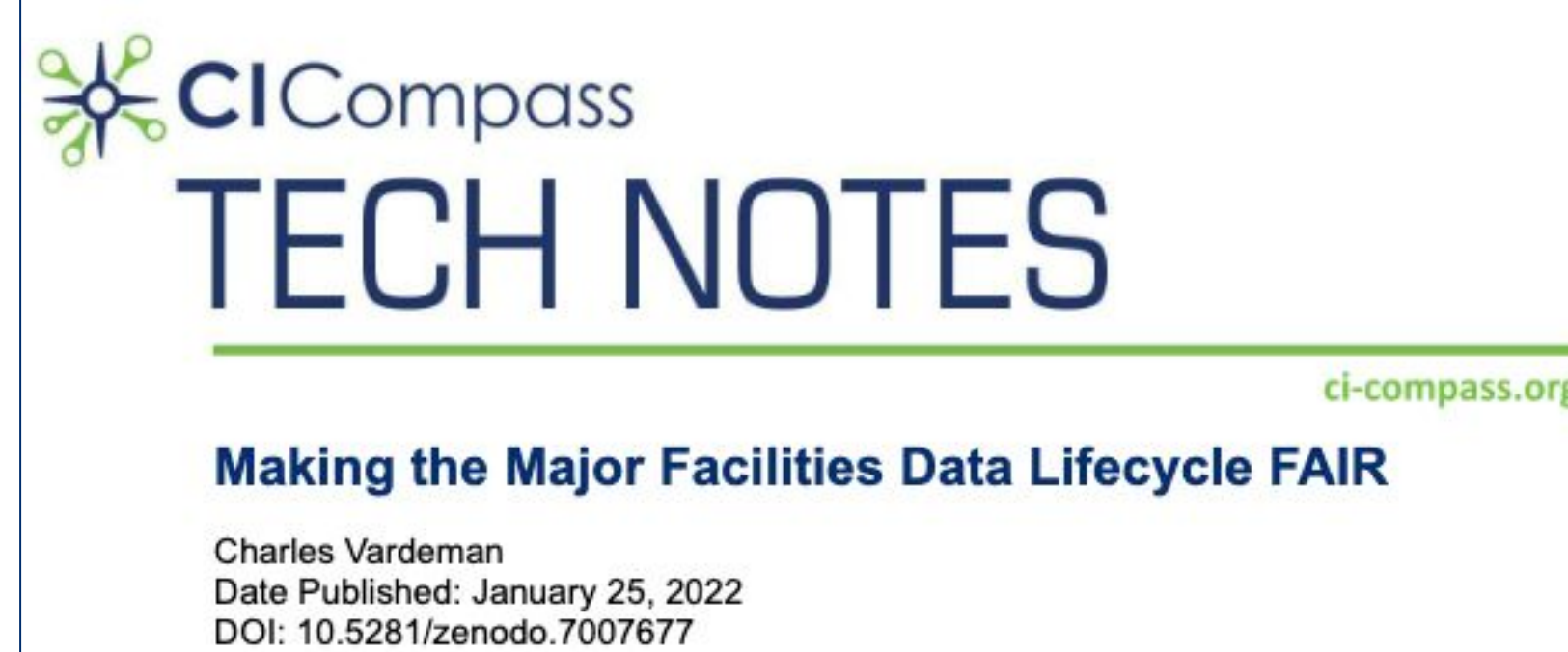
FAIR DATA WORKSHOP AT THE 2023 JOINT CONFERENCE ON DIGITAL LIBRARIES

- Brought together data managers, repository managers, administrators, and others who are responsible for or interested in research data management at large research facilities.
- Aimed to provide cross-pollination between facilities that have similar desires to realize the FAIR principles.
- Discussed issues related to data management that are of interest to large research facilities.

Topics included:

- Impact of the 2022 OSTP Nelson Memo.
- Persistent identifiers and how they are integrated into workflows.
- DOIs on datasets and software; ORCID; Instrument identifiers.
- Strategies of identifying, releasing, and versioning datasets
- Ways of tracking metadata for provenance and computational steps.
- Impacts of cybersecurity on data management and FAIR.
- Data lifecycle planning as an explicit element in facility CI planning.
- Pragmatic ways of approaching FAIR-ness for large facilities.

TECH NOTES AND WEBINARS



FAIR DATA SURVEY

- 15-question survey covering:
 - familiarity with FAIR
 - progress toward FAIR implementation
 - barriers and non-barriers for FAIR implementation
 - value of FAIR implementation
 - what is needed to improve FAIR implementation
- Participants recruited through the National Science Foundation - Large Facilities Office Research Infrastructure Communities of Interest portal and CI Compass listservs

FAIR DATA SURVEY PRELIMINARY RESULTS

Primary job roles: Managers and Supervisors (48.1%), Researchers (14.8%), Data Specialists (11.1%), Repository Managers (5.6%), “Other” (9.3%)

- Personnel from 11 Major Facilities:
 - US Antarctic Program, Arecibo Observatory, Academic Research Fleet, IceCube Neutrino Observatory, International Ocean Discovery Program, Leadership-Class Computing Facility, Large Hadron Collider, Laser Interferometer Gravitational-wave Observatory, National Ecological Observatory Network, SAGE/GAGE, National High Magnetic Field Laboratory, National Optical-Infrared Astronomy Research Laboratory, National Radio Astronomy Observatory, and Ocean Observatories Initiative

