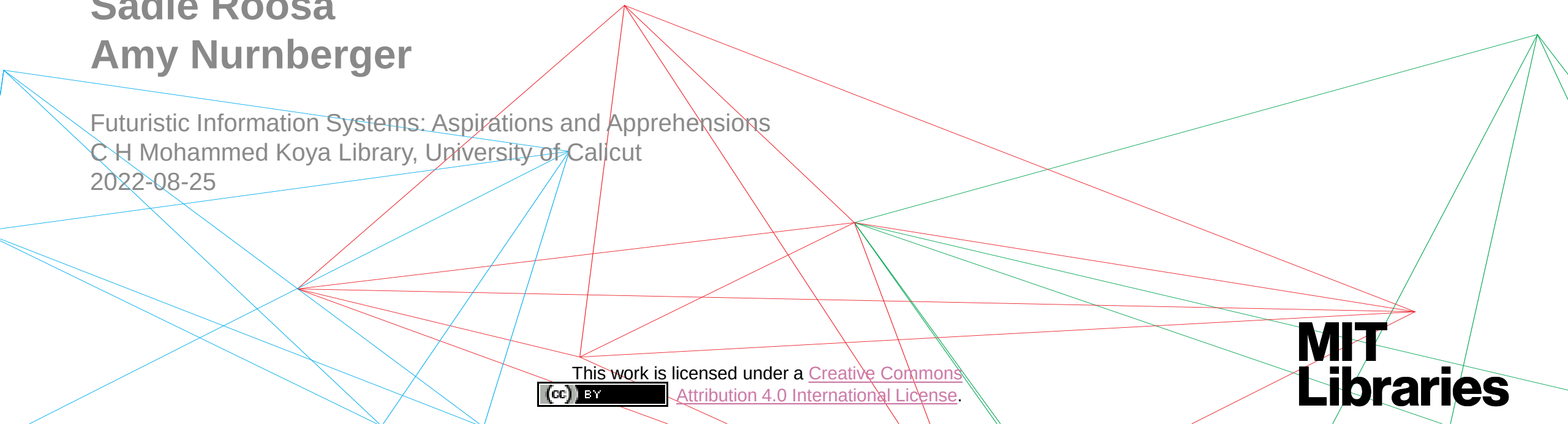
Evolving IRs to serve our expanding open scholarship priorities

Sadie Roosa
Amy Nurnberger

Futuristic Information Systems: Aspirations and Apprehensions
C H Mohammed Koya Library, University of Calicut
2022-08-25



MIT Libraries

Introduction & Expectations

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Collections Strategist for Repository Services

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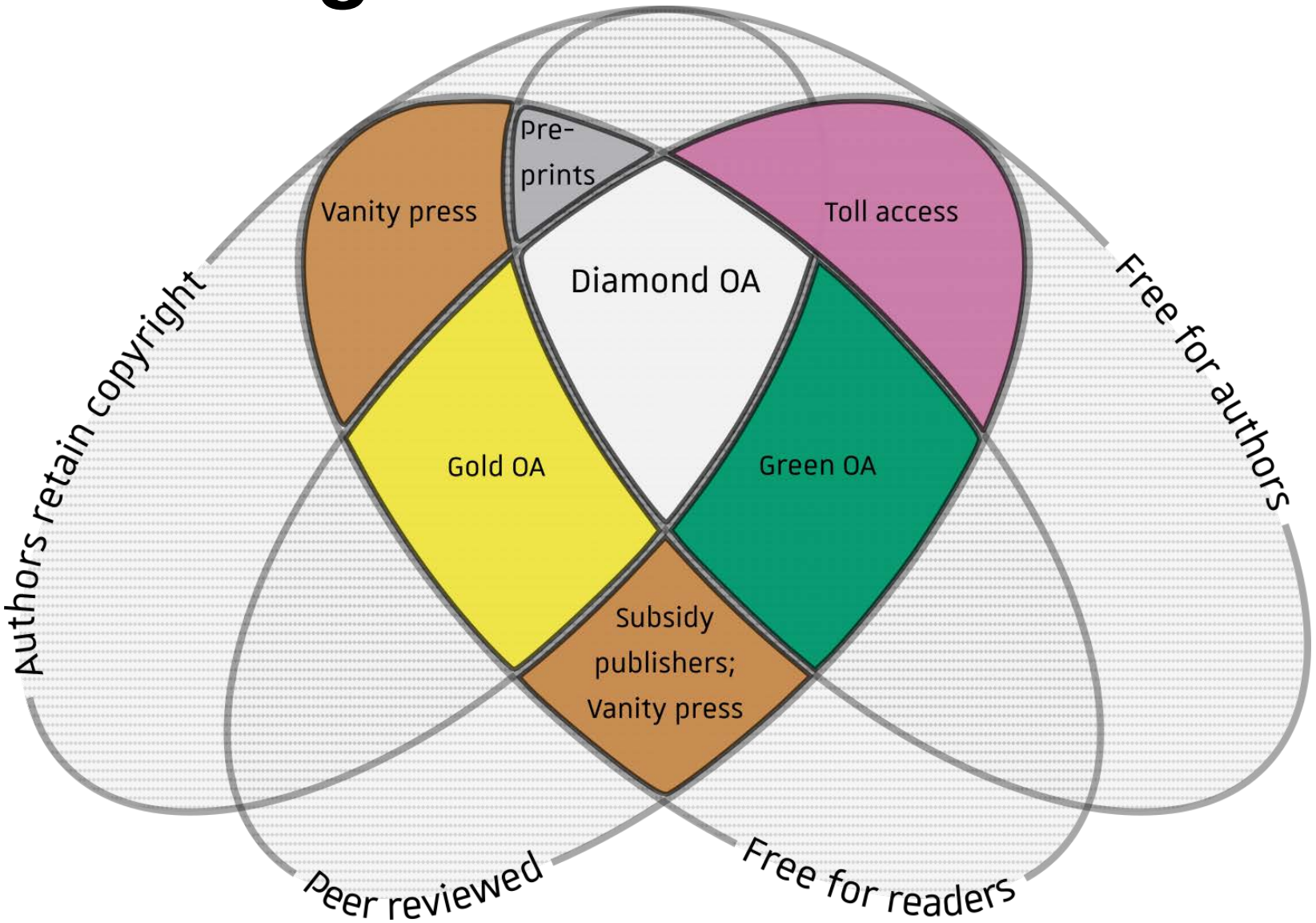
Today we will cover:

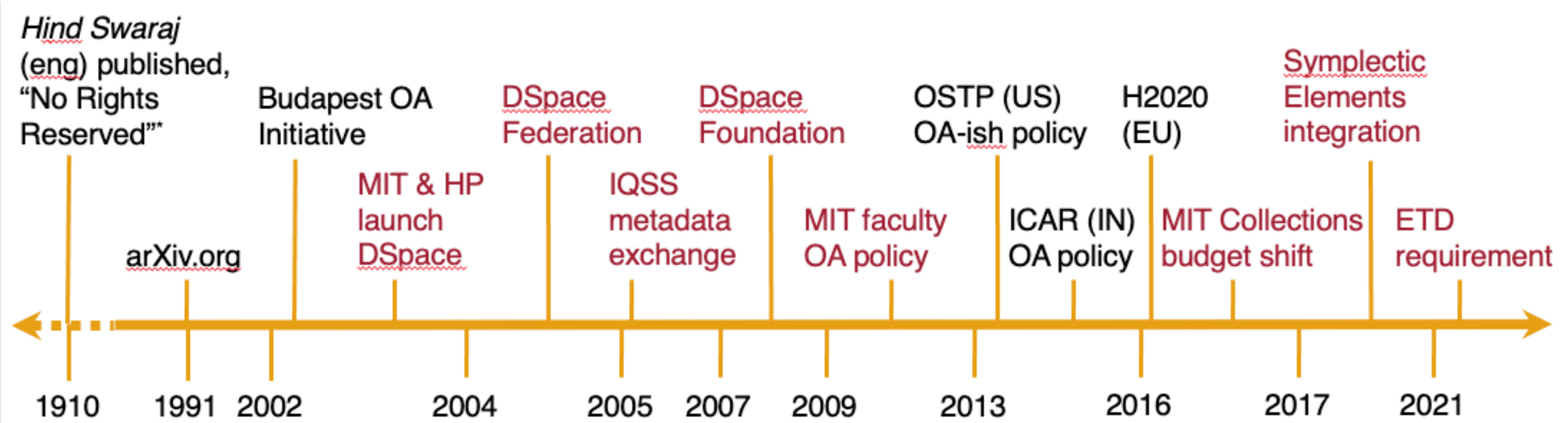
- Background of MIT's institutional repository
- Evolution of philosophy, collections, and technology
- Areas of investment
- Current and future developments

Framing within OA movement: colours



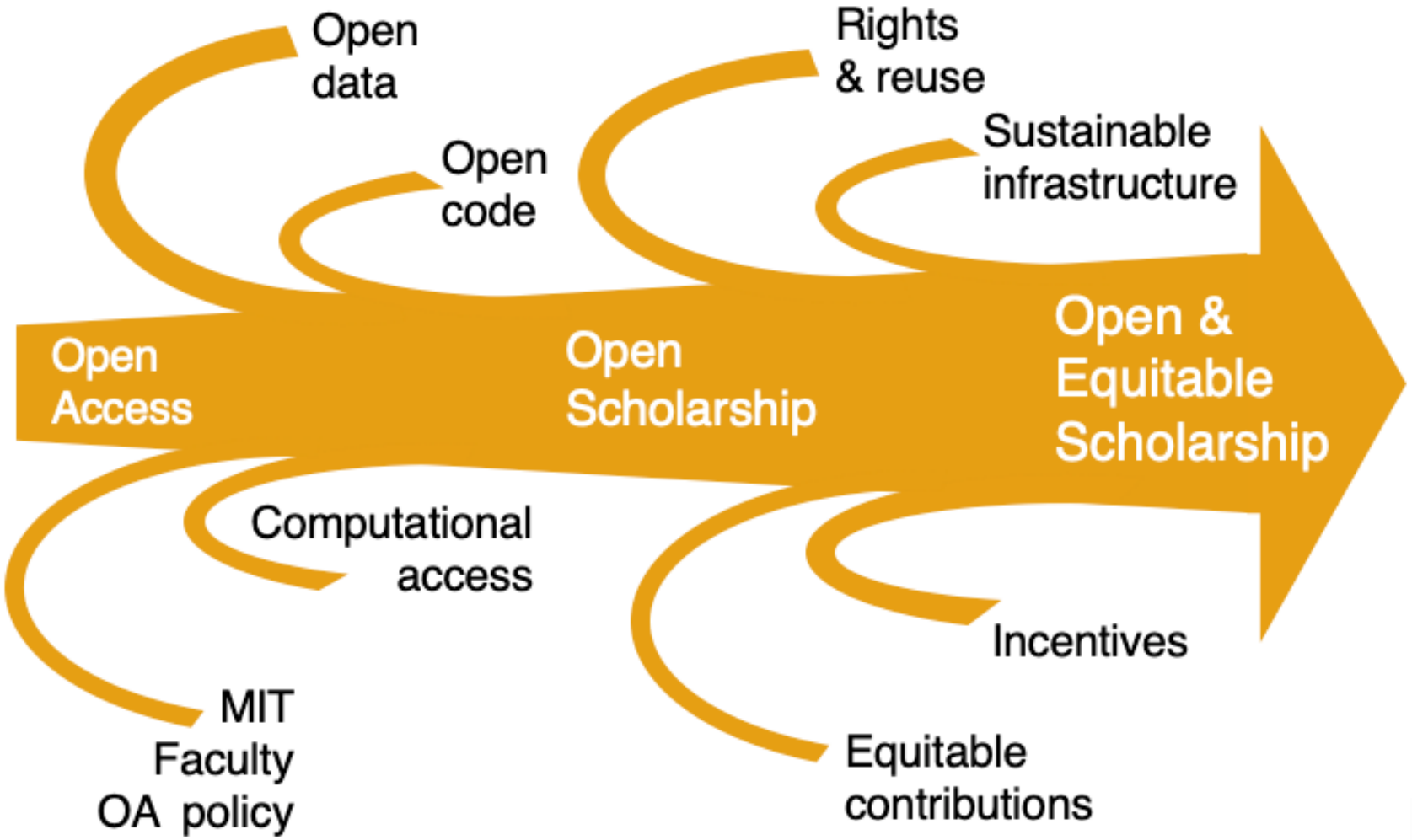
"Open Access colours Venn" Adapted from Farquharson, Jamie Ian (2018-07-31). "Introducing Volcanica: The first diamond open-access journal for volcanology". *Volcanica* **1** (1): i–ix. DOI:10.30909/vol.01.01.i-ix. ISSN 2610-3540. Jamie Farquharson, CC BY 4.0, via Wikimedia Commons https://commons.wikimedia.org/wiki/File:Open_Access_colours_Venn.png

Abbreviated History of OA & MIT Institutional Repository



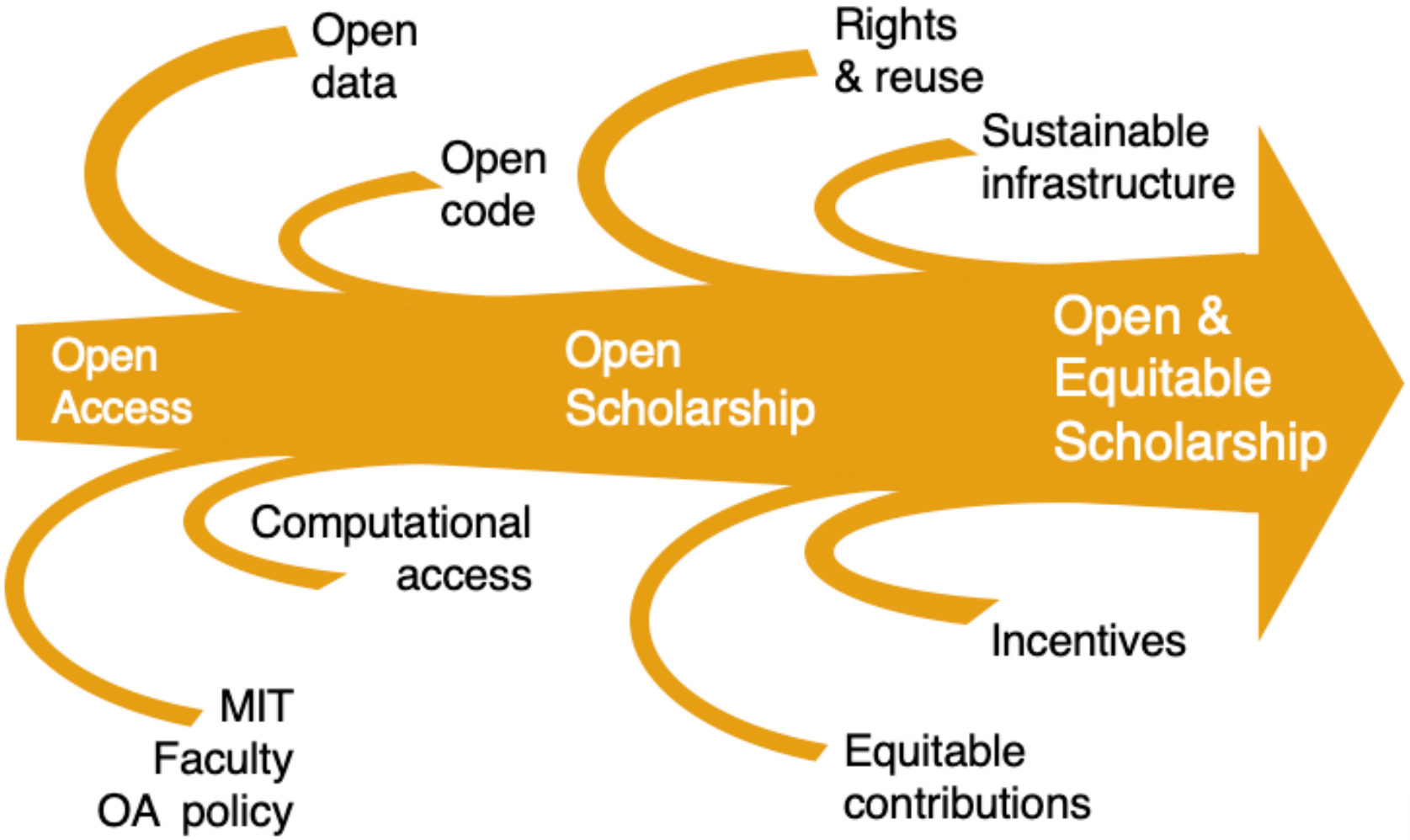
* *"Would Gandhi have been a Wikipedian?". The Indian Express. 17 January 2012. Archived from the original on 9 December 2012.*

Evolution of open philosophy



- Repository strategy
- Research Data Index
- DOI Service
- Framework for Publisher Contracts

Evolution of open philosophy



- Repository strategy
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MIT Framework for Publisher Contracts

Core Principles

- No waivers
- Rights retention/generous reuse rights
- Autodeposit
- Computational access
- Long-term digital preservation and access
- Transparent cost-based pricing for value-added services

https://libraries.mit.edu/scholarly/publishing/framework/

Evolution of repository technology

A cautionary tale:

- Started and have stayed on DSpace so far
- Branched off in version 1.8, lots of customizations
  - Maintenance challenges
  - Unable to contribute back to open source core code
- Eventual migration back to core code (6.3)

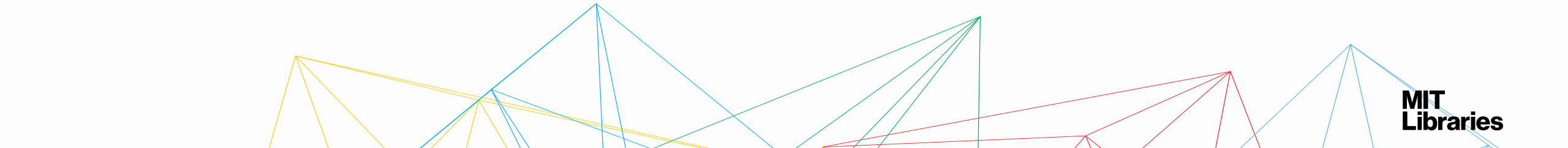
https://dspace.mit.edu/

Evolution of repository collections

Overall purpose: Opening MIT content to the world

- In the beginning it was mostly working papers, research briefs, and technical reports
- Theses also started being added in 2004
- More and more DLC collections
- OA Articles collection started in 2009
- Tried a “if you build it, they will come” approach that did not work
- Grey literature digitized from archives
- Collection of smaller datasets, related to articles or theses

AREAS OF INVESTMENT



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Green OA at MIT

- Over 47,000 articles, proceedings, and book chapters in the Open Access collection
- 57% of all MIT authored articles since 2009 is freely available to download in our repository
- Nearly 20 million page views
- Nearly 21.5 million downloads

Investing in Green OA – Acquisitions Staff

One dedicated staff member

- Gathers files of openly available work or asks faculty for their final manuscripts
- Verifies the version being deposited is in compliance with MIT and publisher policies
- Deposits files through Symplectic Elements to DSpace crosswalk
- Verifies metadata and files for items auto deposited into DSpace by publishers

Investing in Green OA – Metadata Staff

A team of staff members who also have other responsibilities

- Manage crosswalks from data sources into repository
- Conduct authority work for author and department names
- Verify publications and other descriptive information
- Respond to user inquiries about metadata details and access to embargoed items

Investing in Green OA – Outreach

The repository and open access teams collaborate with the **scholarly communications librarian**, **liaison librarians** and **Data Management Services team,** who

- Understand OA practices and trends in various disciplines
- Work with acquisitions staff to maintain relations with faculty and routinely and unobtrusively obtain final manuscripts
- Highlight opportunities outside of journal and conference publications for faculty to share research outputs through the repository

Investing in Green OA – Infrastructure and Development Staff

Vendor

- Hosts and maintains DSpace@MIT and develops new features

Infrastructure Engineering team

- Maintains integrations between repository and other Libraries and MIT systems

Team of Developers

- Builds apps outside of the repository to improve how researchers can use DSpace@MIT to share their research

Systems Manager and Repository Strategist

- Coordinate between vendor and MIT, test/roll out new features

Investing in Green OA – Publisher autodeposit

Negotiations team:

- Negotiates terms for autodeposit into publisher agreements (per MIT Framework)

Repository Services team:

- Works with publisher's technical staff to implement new systems to allow them to autodeposit

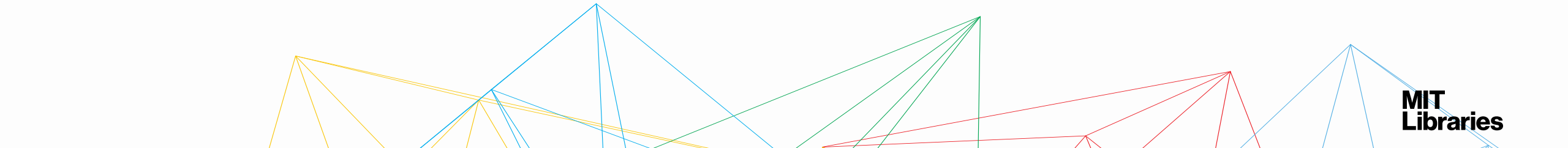
Digital Library Services team:

- Built an internal system that allows us to automated deposit of publisher provided materials

Scholarly Communications Strategy team:

- Support persistent IDs for organizations, which would help publishers with affiliation issues

CURRENT & FUTURE DEVELOPMENTS



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Electronic theses

- Began adding to DSpace@MIT in 2004
  - Scanning the physical copies each semester
  - Also adding legacy theses scans when able
- Since 2020 collecting PDFs from degree granting departments
- Faculty approved policy to collect electronic copies as versions of record
- Thesis specs now include guidelines for creating screen-reader accessible PDFs
- Developed an accessible LaTeX template conforming to MIT Thesis specs

Supporting researchers' needs

- Create group and individual collections
- Provide researchers with training to administer their own collections
- Make templates and scripts to run batch deposits on researchers' behalf
- Maintain collections after researcher no longer actively depositing
- Collaborate with Data Management Services and Liaisons

Current use of persistent identifiers

- Mint handles for all collections and items - allows people to find content to our collections throughout their research
- Include DOIs to publisher versions of OA articles - allows people to cite versions of record
- Connect all versions of an item to the same handle with a version history – allows each version to be cited, while connecting users to most up to date research

Improving use of persistent identifiers

- Implement ORCID in repository to disambiguate authors and better show connections between research
- Invest more in metadata and user interface design to connect DSpace items to related research, like data and code in other repositories
- Explore COAR Notify, an exciting innovation we might use to connect repositories with other OS infrastructure, like open peer review, overlay journals, and data repositories

Repository uses to serve more users

Improving the accessibility of content, so that is actually is OPEN to everyone

This can go hand in hand with increasing computational access to collections

Related presentation at https://tinyurl.com/mit-accessible-oa

Thank you!

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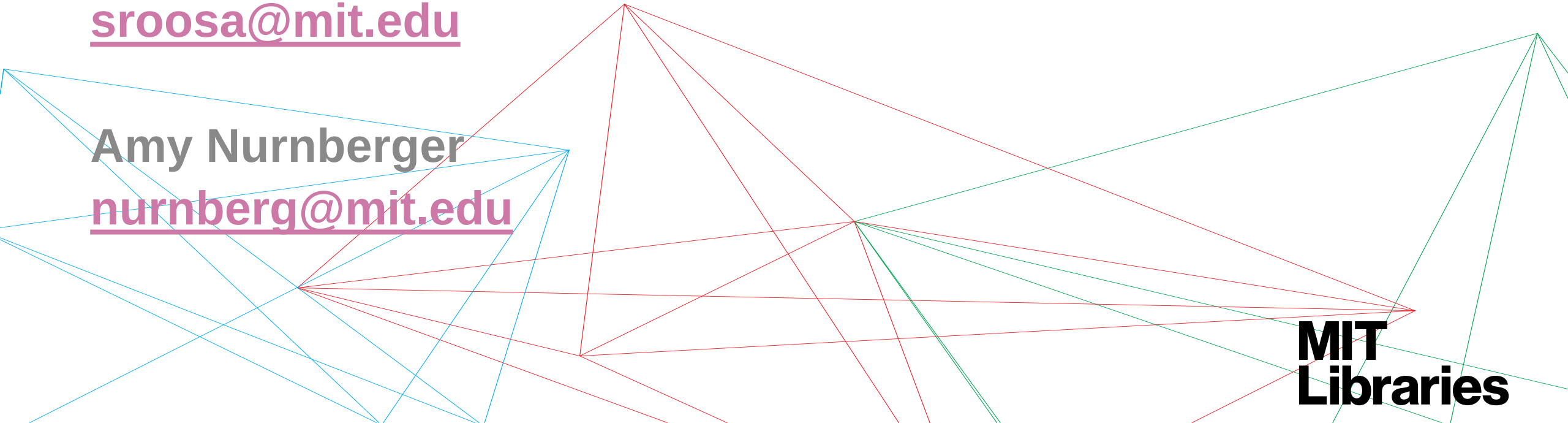

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