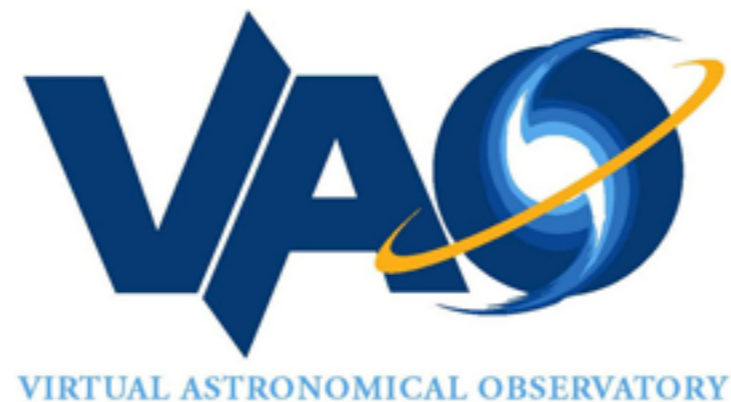


# Advanced Linking in the VAO

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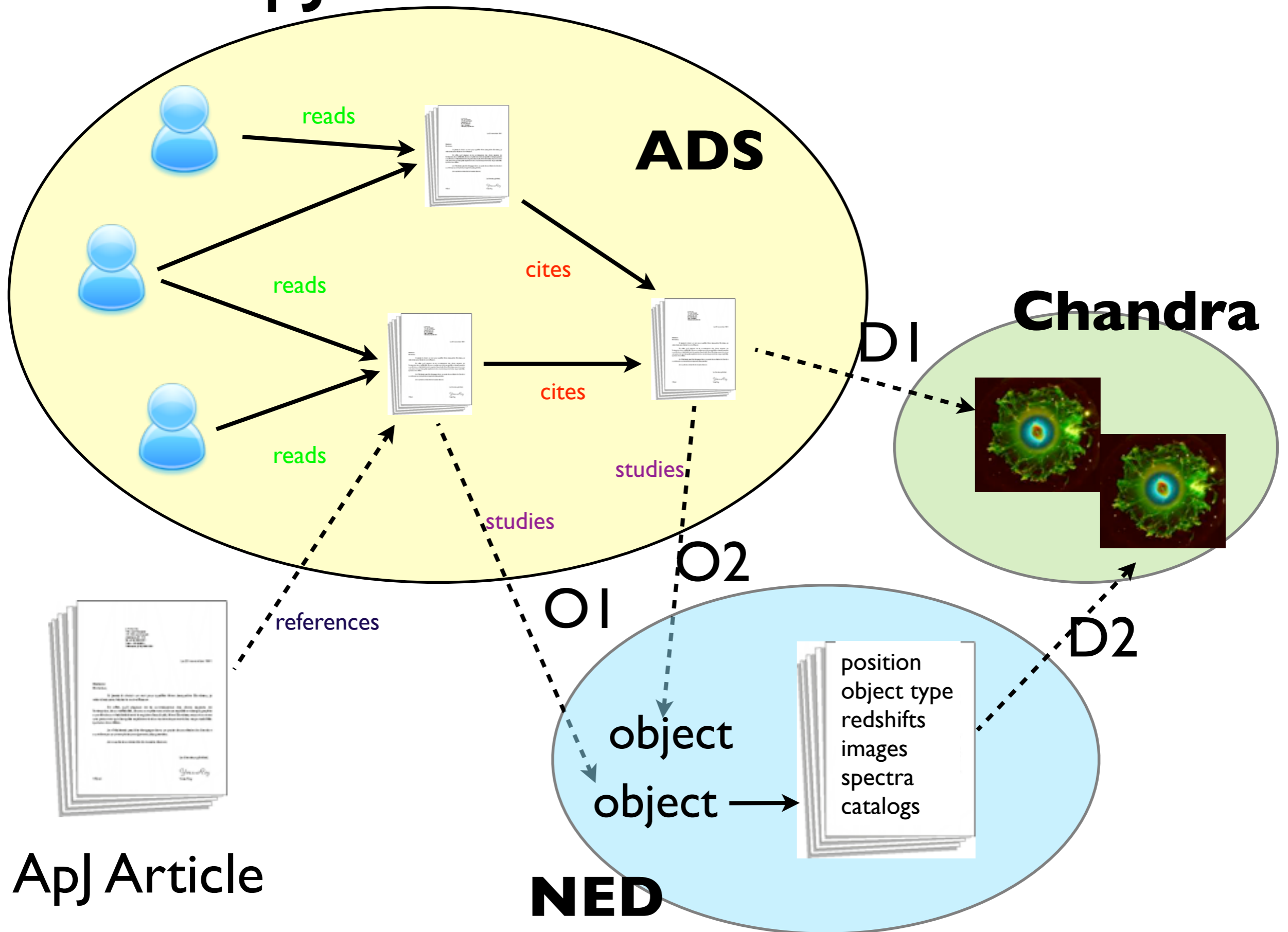
# Participants (so far)

- ADS (bibliographic metadata model)
- Microsoft Research / Alyssa Goodman (Visualization / WWWT)
- VAO DC&P (DM, semantic infrastructure)
- Chandra and MAST (Observational metadata / bibliographic linkages)
- SIMBAD and NED (object metadata)

# The Big Picture

- Scientific research requires *repeatability*
- The lifecycle of a research project should be documented by *capturing all artifacts*
- Data, Processes, Results need to be properly described, accessible, and *linked* together
- *Provenance* information should be attached to curated metadata throughout the process

# ApJ/ADS/NED/Chandra



# What metadata integration can do

- Create a *semantic knowledge base*, allowing integration of heterogeneous metadata, tracking of provenance, attribution
- Enable UIs integrating *views of bibliographies, objects, datasets*, other resources interacting together (“mashups”)
- Enrich services hosted by different archives, support the creation of the “*article of the future*”
- Support the *retrofitting of semantics* over the existing body of curated knowledge, papers

# Semantic Interlinking in IVOA

- Exposing and integrating existing metadata from separate archives allows computing over *heterogeneous VO resources*
- Tackles *outstanding issues* with dataset IDs, relates to ongoing VAO and IVOA DC&P activities
- Provides semantic layer over existing resources, *crossing boundaries* between archives
- Now finally possible, thanks to ObsCore, DM, IVOA Semantics, VAO portal, all people in this room

# Prototype and Demo

<http://labs.adsabs.harvard.edu/ui>