

National Data Service

**DATA AND SCHOLARLY
LITERATURE LINKING
TECHNOLOGIES OVER
DISTRIBUTED REPOSITORIES**

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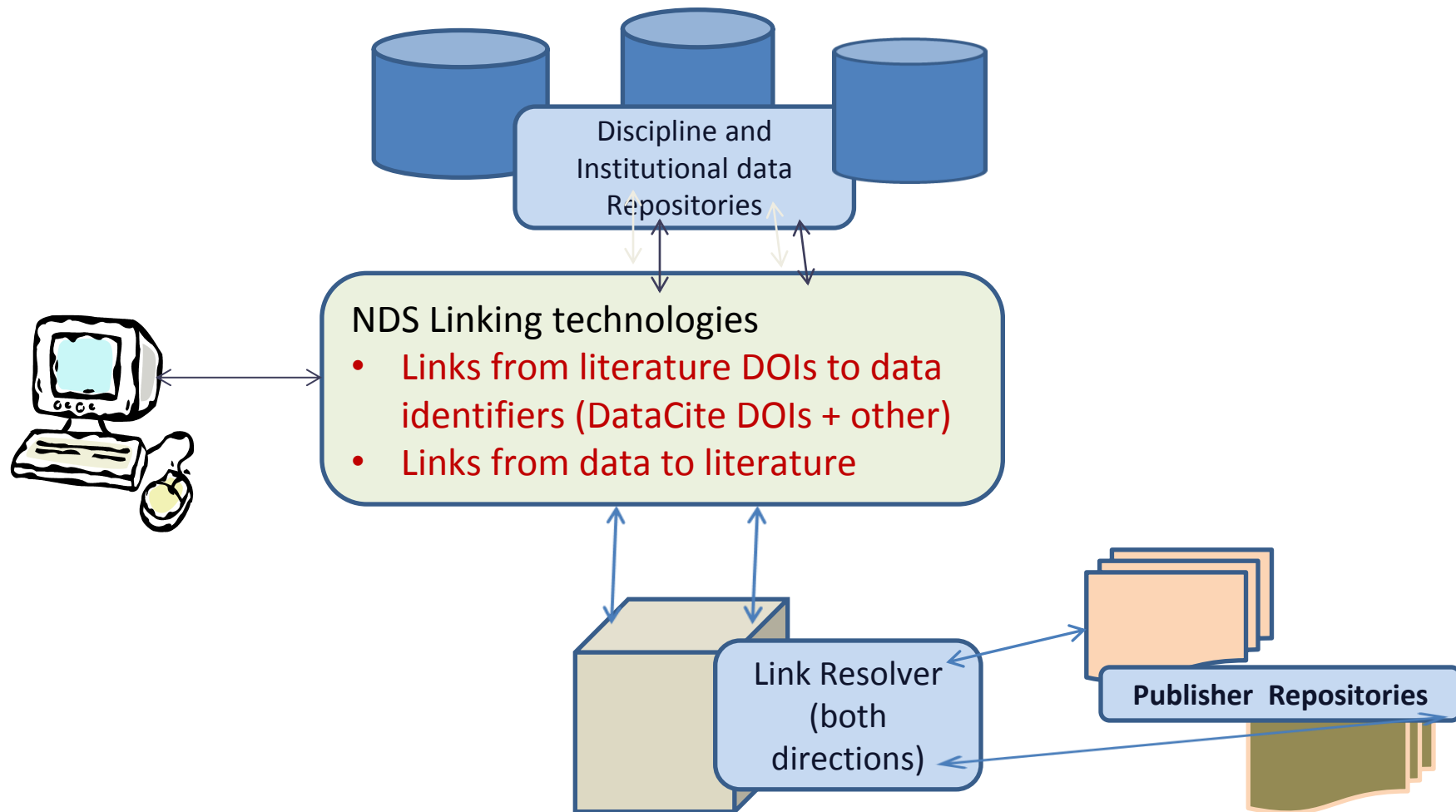
NDS Services

- Assist in publishing, linking, and preservation of researcher data.
- A dataset recommender service that will assist researchers in identifying candidate data repositories.
- Data deposit negotiator and assistance.
- A linking service between article Digital Object Identifiers (DOIs) and data repository DOIs and other identifiers.

Linking

- Need for infrastructure for linking datasets from disciplinary, federal, and institutional repositories with publisher repositories.
- Role of article retrieval databases such as Scopus.
- Must accommodate datasets from distributed, heterogeneous repositories
- Data to literature and literature to data <- -> link resolution mechanisms.

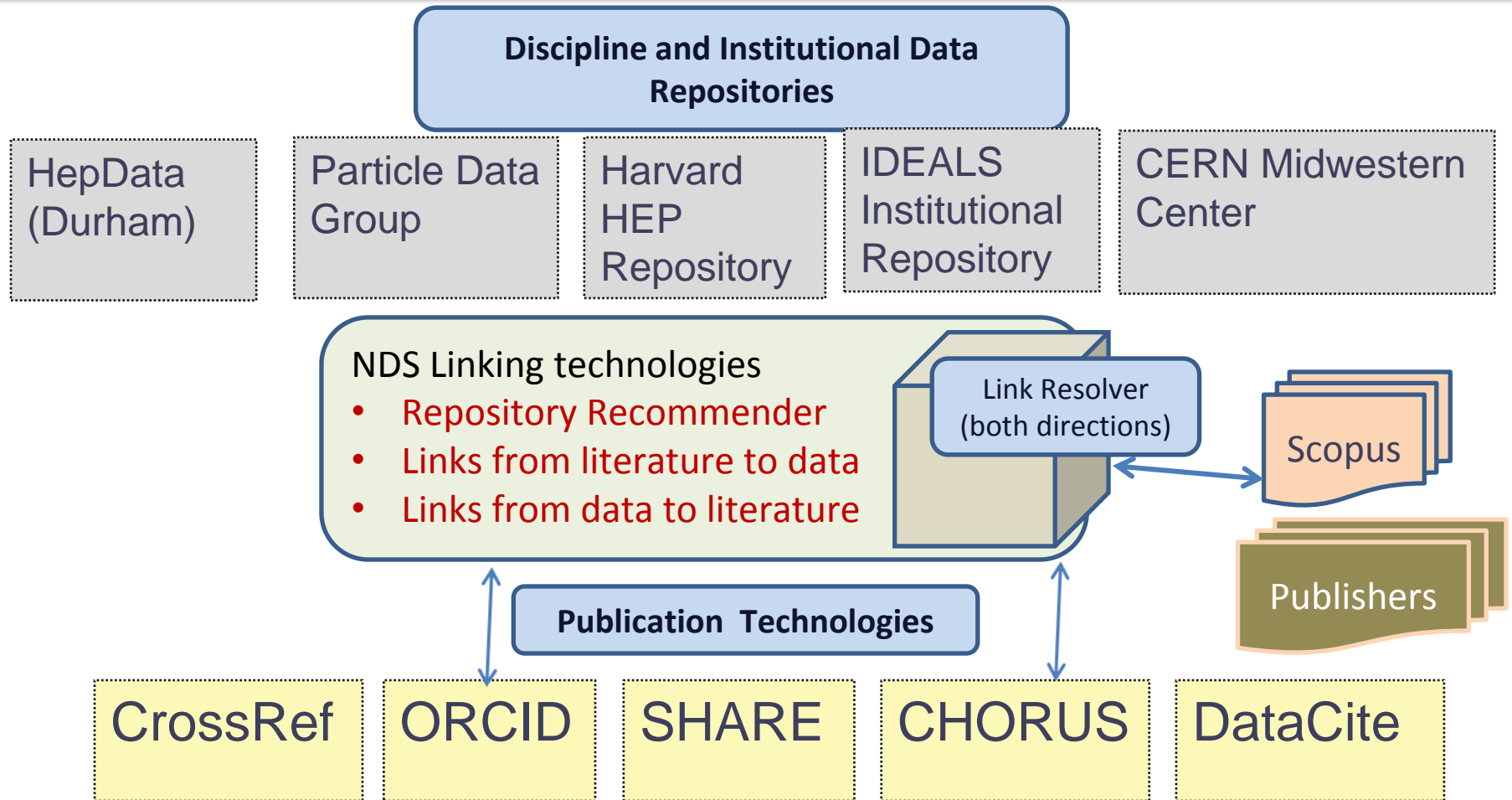
Linking Technologies and Mechanisms



Test Case

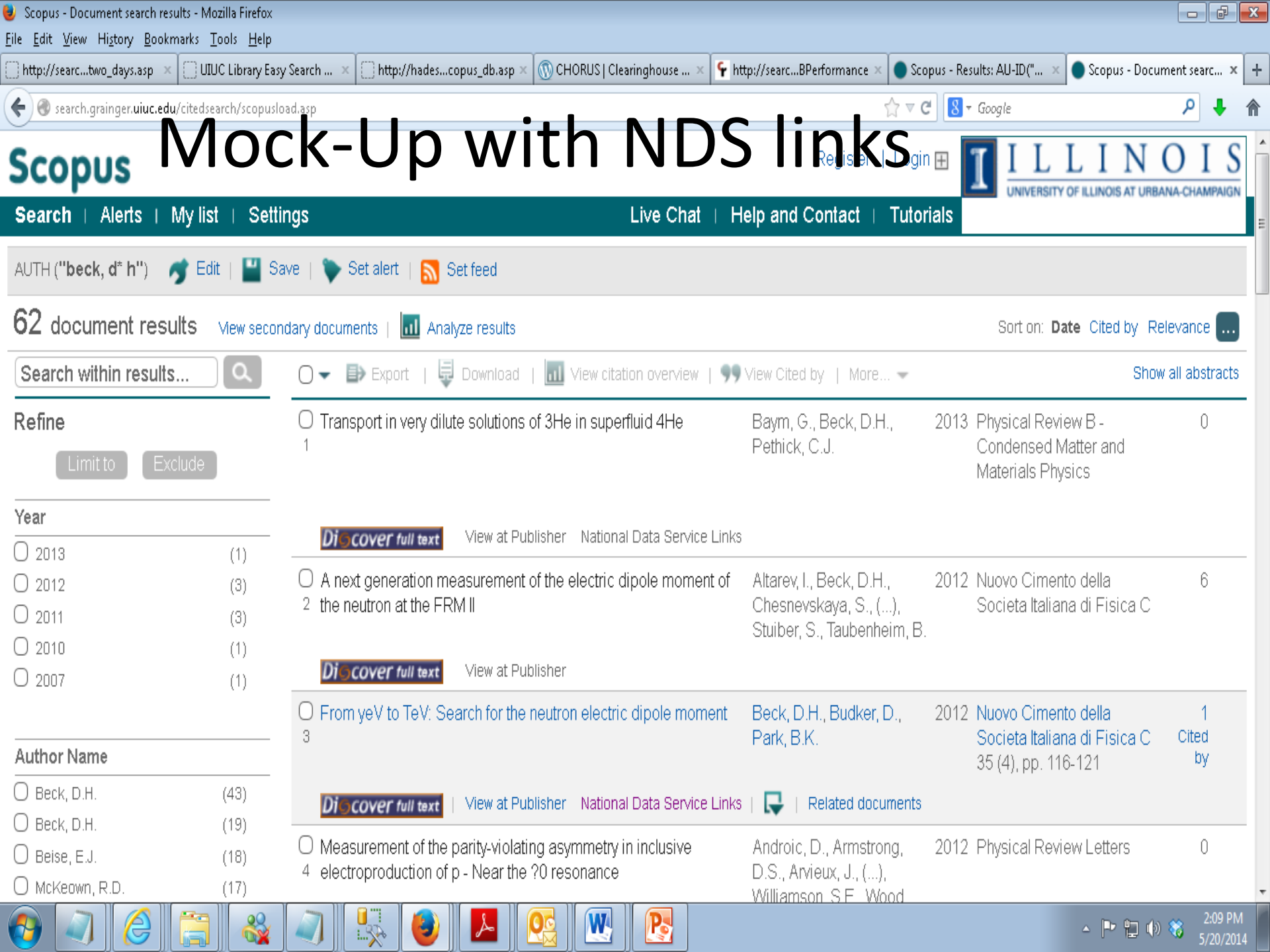
- High Energy Physics (HEP).
- Douglas Beck, Professor, Physics.
- Datasets in disciplinary repositories, federal grant and agency repositories, and institutional repositories.
- Publications in multiple professional society and commercial publisher repositories.

Repository & Link Environment for High Energy Physics



Test Case: Links in Scopus

- Author or topical search in Elsevier Scopus article database.
- Search results include National Data Service Links.
- The NDS Links go to landing page with specific dataset links.



Mock-Up with NDS links



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AUTH ("beck, d* h") [Edit](#) [Save](#) [Set alert](#) [Set feed](#)

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Year
 2013 (1)
 2012 (3)
 2011 (3)
 2010 (1)
 2007 (1)

Author Name
 Beck, D.H. (43)
 Beck, D.H. (19)
 Beise, E.J. (18)
 McKeown, R.D. (17)

<input type="radio"/> 1	Transport in very dilute solutions of 3He in superfluid 4He	Baym, G., Beck, D.H., Pethick, C.J.	2013	Physical Review B - Condensed Matter and Materials Physics	0
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<input type="radio"/> 2	A next generation measurement of the electric dipole moment of the neutron at the FRM II	Altarev, I., Beck, D.H., Chesnevskaya, S., (...), Stuibler, S., Taubenheim, B.	2012	Nuovo Cimento della Societa Italiana di Fisica C	6
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<input type="radio"/> 3	From yeV to TeV: Search for the neutron electric dipole moment	Beck, D.H., Budker, D., Park, B.K.	2012	Nuovo Cimento della Societa Italiana di Fisica C 35 (4), pp. 116-121	1 Cited by
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<input type="radio"/> 4	Measurement of the parity-violating asymmetry in inclusive electroproduction of p - Near the ?0 resonance	Androic, D., Armstrong, D.S., Arvieux, J., (...), Williamson, S.F. Wood	2012	Physical Review Letters	0

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Datasets for Beck, D. H. (2013) Transport in Very Dilute Solutions of 3HE ...

HOME 2013 TRANSPORT IN VERY DILUTE SOLUTIONS OF 3HE

Datasets for this article:

Data from Hepdata: [Lepton Equations and Gluonsdata](#)

Review dataset on: [3HE Data from PDG 2013](#)

Data from IDEALS Harvard HEP