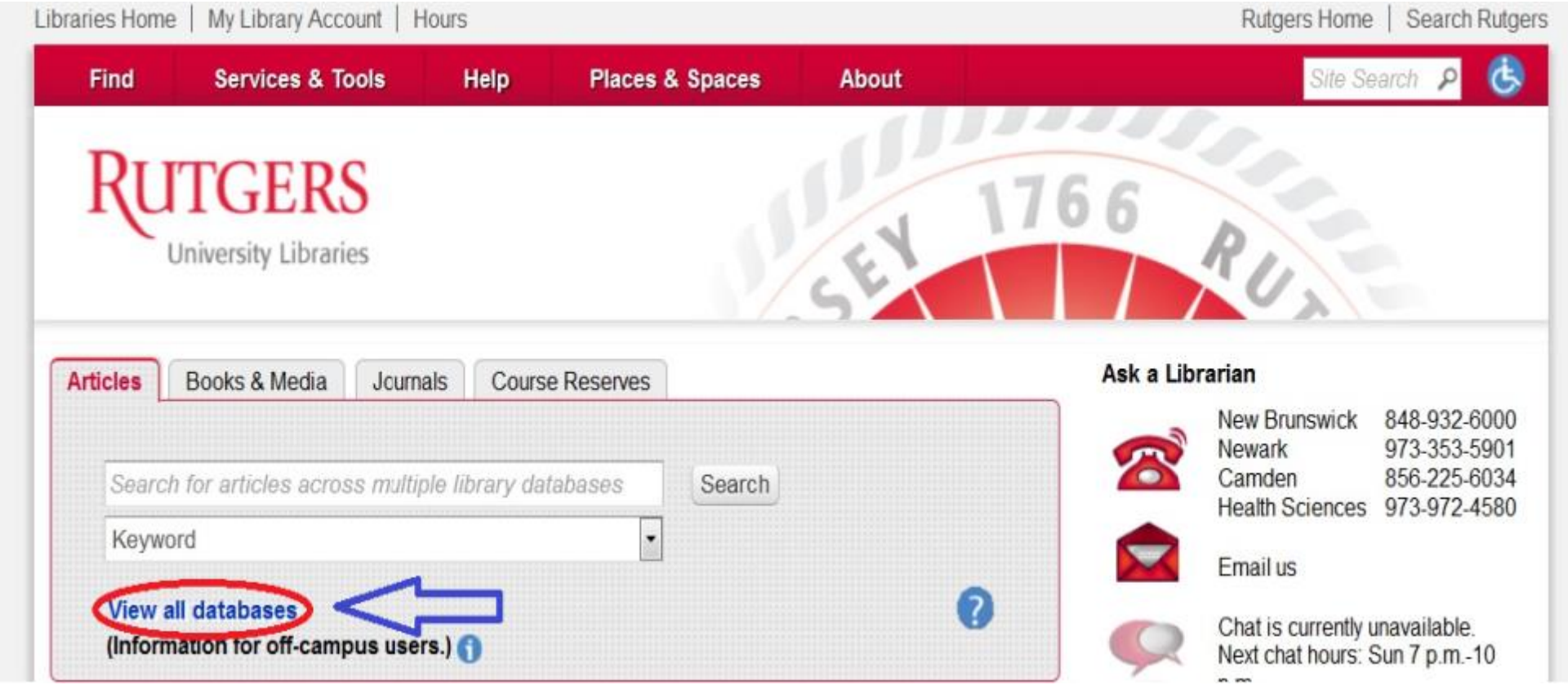
RUTGERS
University Libraries

Research Resources in Physics and Astronomy

Laura Palumbo, Chemistry & Physics Librarian/
Science Data Specialist

November 22, 2016

http://libraries.rutgers.edu

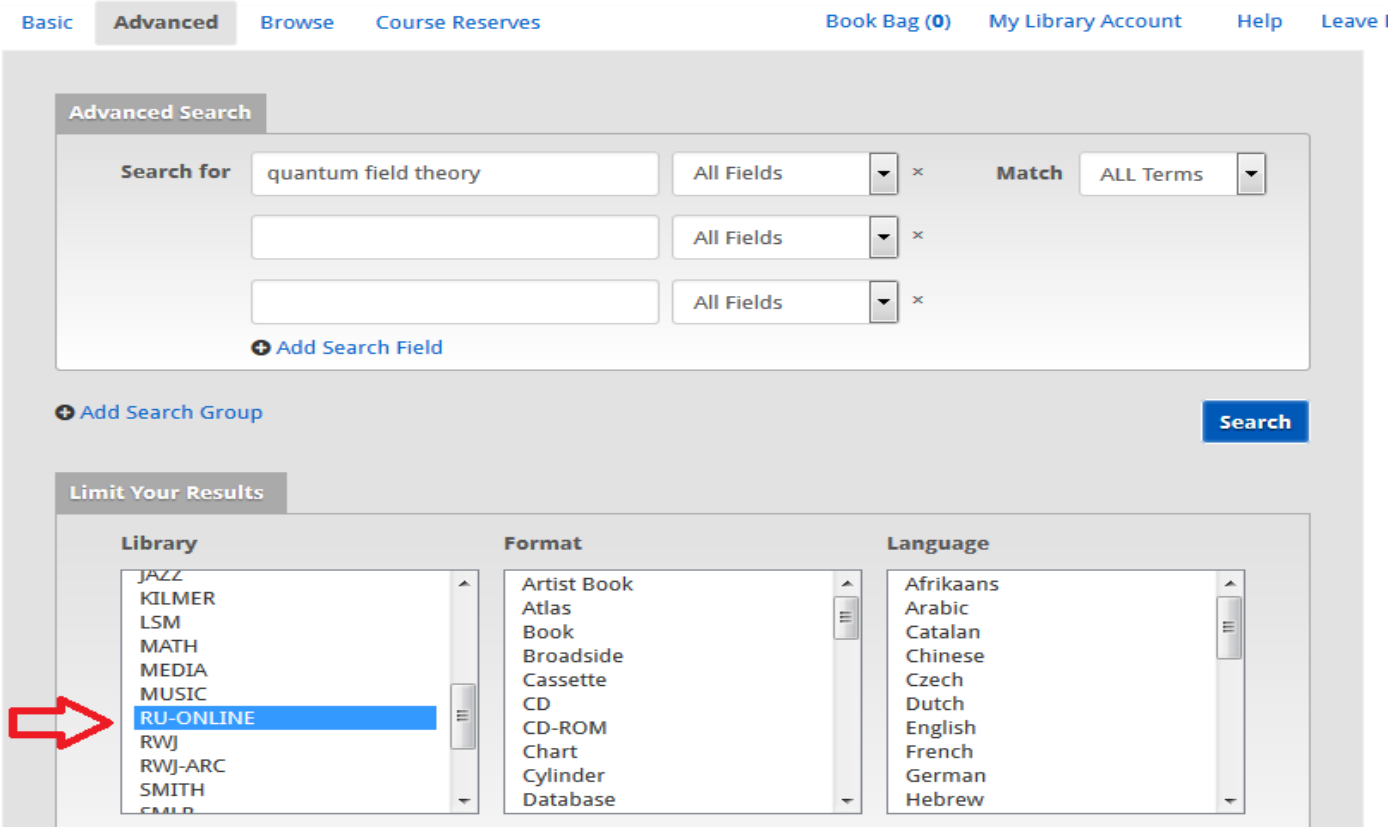


RUTGERS

Find e-books: Advanced Search

https://catalog.libraries.rutgers.edu/vufind/Search/Advanced

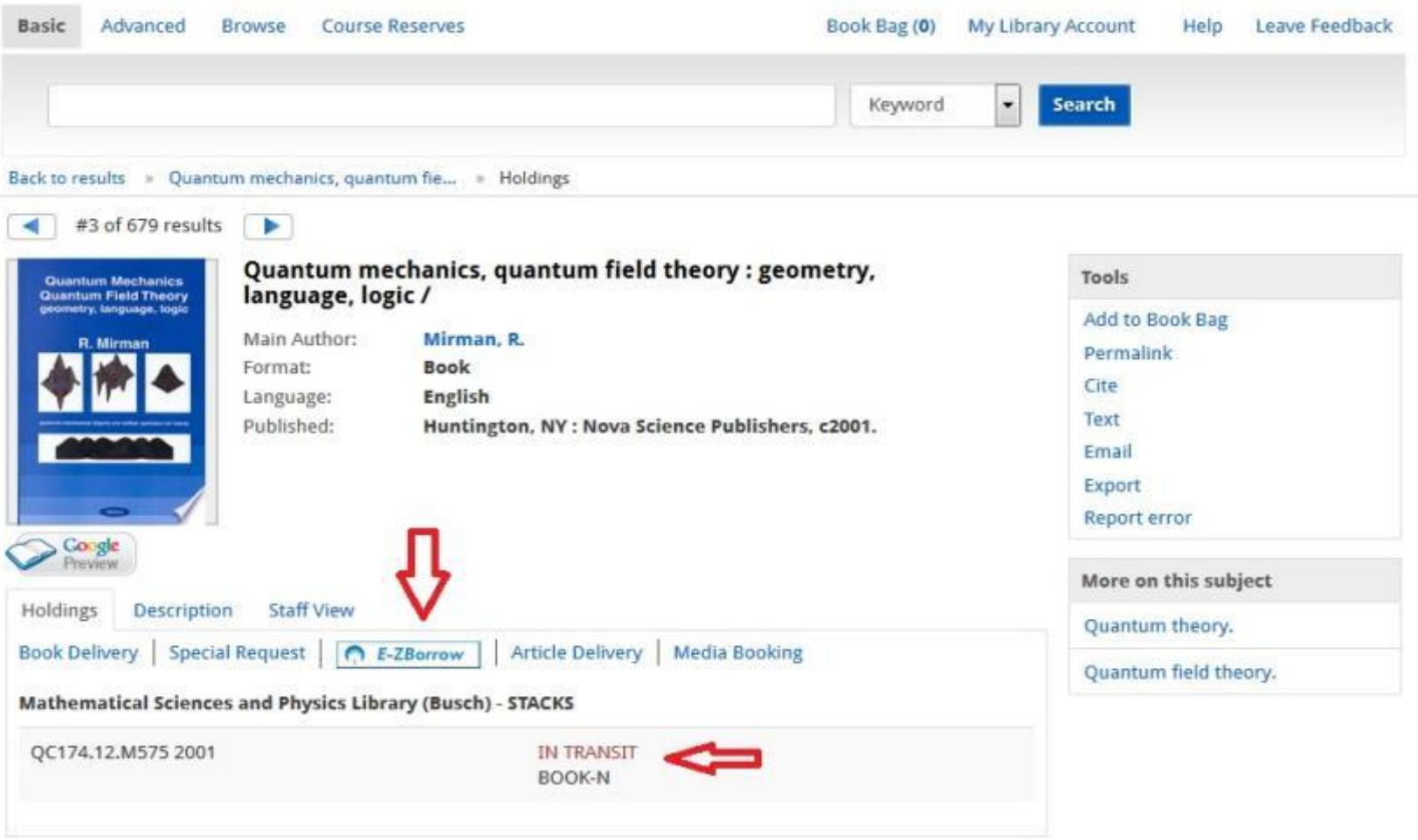
- Books tab > More options > Advanced Search
- Type title or keywords, select RUonline from Library dropdown



RUTGERS

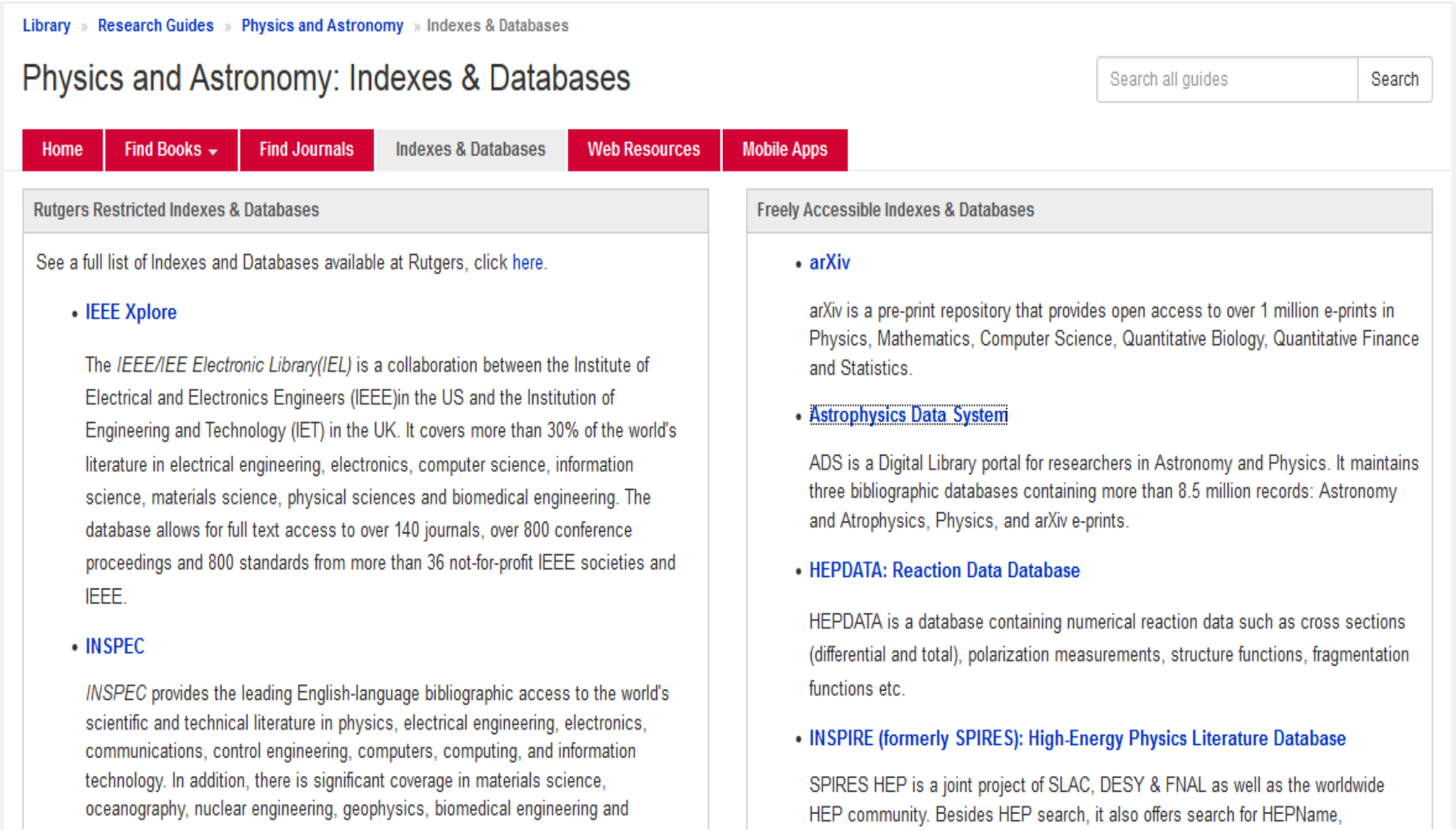
Use EZBorrow for unavailable items

https://www2.libraries.rutgers.edu/login/ezborrow.php



RUTGERS

http://libguides.rutgers.edu/physics



Databases to consider:

Rutgers restricted- log in through the Libraries website if not on campus

INSPEC http://www.libraries.rutgers.edu/indexes/inspec

Physics, biophysics, electronics, computing, materials science

IEEE Xplore http://www.libraries.rutgers.edu/indexes/ieee

Quantum computing, semiconductors, nanomaterials, biological physics

MathSciNet
http://www.libraries.rutgers.edu/indexes/mathscinet

Mathematical physics

Databases

Web of Science
http://www.libraries.rutgers.edu/indexes/web_of_science
Useful for cited reference searches

SciFinder
http://www.libraries.rutgers.edu/indexes/scifinder_scholar
Chemistry- use for condensed matter physics

- Need to create account- must be on campus, use Rutgers e-mail to register **(See instructions for creating an account)**
- After initial registration, can use off campus

RUTGERS

INSPIRE

Welcome to INSPIRE, the High Energy Physics information system. Please direct questions, comments or concerns to feedback@inspirehep.net.

HEP :: HEPNAMES :: INSTITUTIONS :: CONFERENCES :: JOBS :: EXPERIMENTS :: JOURNALS :: HELP

HEP Search

High-Energy Physics Literature Database

Use "find " for SPIRES-style search (other tips)

Brief format | Search | Easy Search | Advanced Search

find j "Phys.Rev.Lett.,105*" :: more

HOW TO SEARCH

SPIRES syntax is (mostly) supported (requires "find")

- find a richter, b and t quark and date > 1984
- find j phys.rev.,D50,1140 or j jhep,0903,112
- find eprint arxiv:1007.5048 (Note the plots available on the detailed record)
- find fulltext "quark-gluon plasma" (Note new "fulltext" operator)
- find a ellis and refersto a witten (Note "refersto")
- find a kane and citedby title SUSY and topcite 200+ (Note "citedby")

New techniques:

HEP

- Additions
- Corrections
- Search Tips
- FAQ
- Topcites: annual | recent
- Reviews
- HEP Citesummary
- Tools

INSPIRE

- About INSPIRE
- INSPIRE Help Central
- Blog
- Twitter
- feedback@inspirehep.net

RESOURCES

- ADS

RUTGERS

Easy Search Interface

Welcome to INSPIRE, the High Energy Physics information system. Please direct questions, comments or concerns to feedback@inspirehep.net.

HEP :: HEPNAMES :: INSTITUTIONS :: CONFERENCES :: JOBS :: EXPERIMENTS :: JOURNALS :: HELP

Easy Search

Welcome to Easy Search of HEP.

Author: gilman, r
Title:
Report Number:
Affiliation: rutgers
Collaboration:
Keywords:
Eprint: Any Type Number
Topcite: Don't care
Journal: Any Journal vol: pg:
Date: until:

Search

ADS- Astrophysics Data System

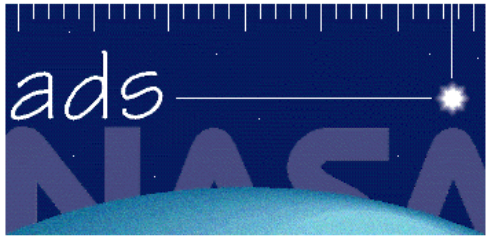
http://adswww.harvard.edu/

ADS Services
Search
Browse
myADS
Mirrors
Feedback
FAQ
What's new
Site Map
Help

Other NASA Centers
CXC
HEASARC
IRSA
MAST
NED
NSSDC
PDS
SPITZER

Related Sites
AAS
ADEC
arXiv
CDS
IAU

CfA



The SAO/NASA Astrophysics Data System

Search

Search Browse Help

Welcome to the Digital Library for Physics and Astronomy

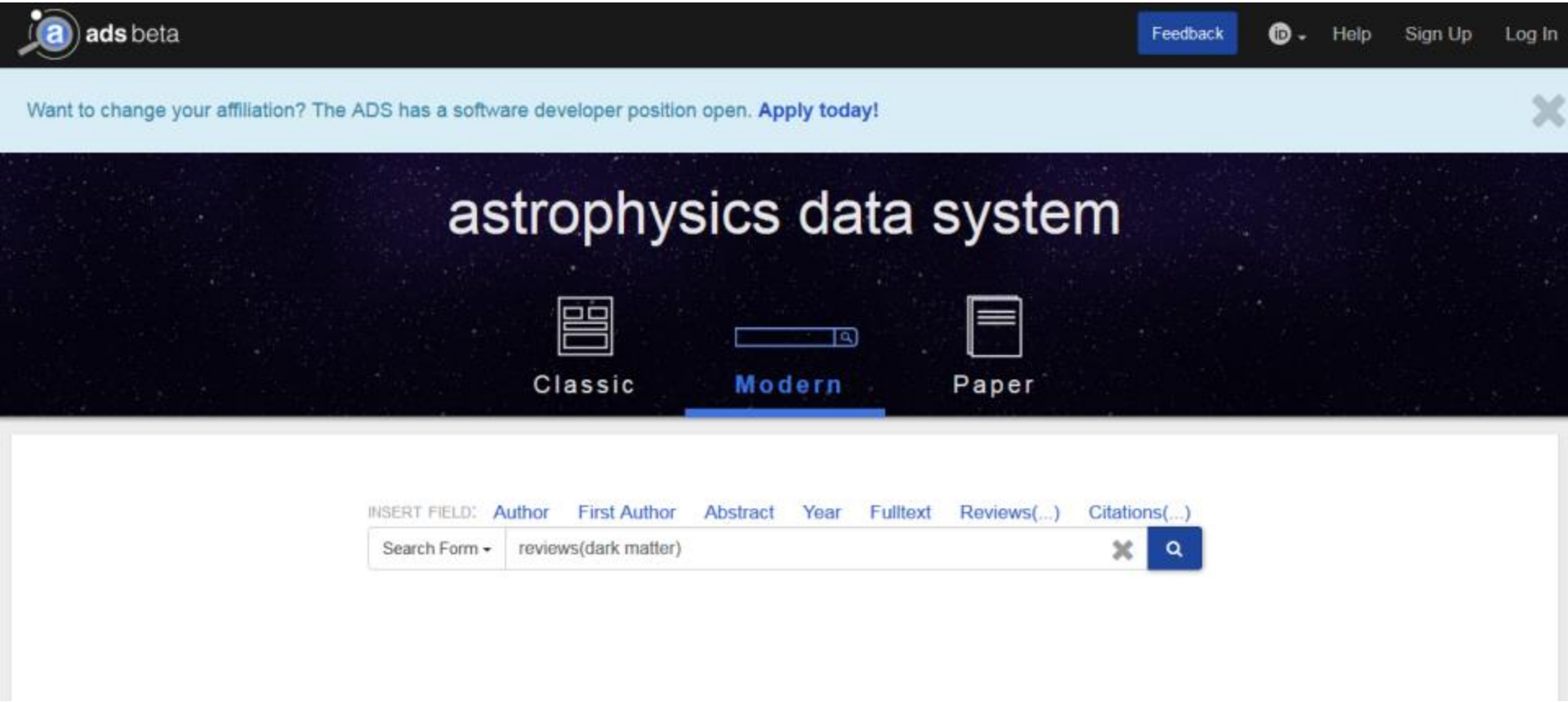
This site is hosted by the
High Energy Astrophysics Division at the
Harvard-Smithsonian Center for Astrophysics

The SAO/NASA Astrophysics Data System (ADS) is a Digital Library portal for researchers in Astronomy and Physics, operated by the Smithsonian Astrophysical Observatory (SAO) under a NASA grant. The ADS maintains three bibliographic databases containing more than 11.6 million records covering publications in Astronomy and Astrophysics, Physics, and the arXiv e-prints. Abstracts and full-text of major astronomy and physics publications are indexed and searchable through the new ADS "Bumblebee" interface as well as the traditional "Classic" search forms. A set of browsable interfaces are also available.

In addition to maintaining its bibliographic corpus, the ADS tracks citations and usage of its records to provide advanced discovery and evaluation capabilities. Integrated in its databases, the ADS provides access and pointers to a wealth of external resources, including electronic articles available from publisher's websites, astronomical object information, data catalogs and data sets hosted by external archives. We currently have links to over 11.2 million records maintained by our collaborators.

ADS- try the new Bumblebee search

https://ui.adsabs.harvard.edu/



Preventing Plagiarism

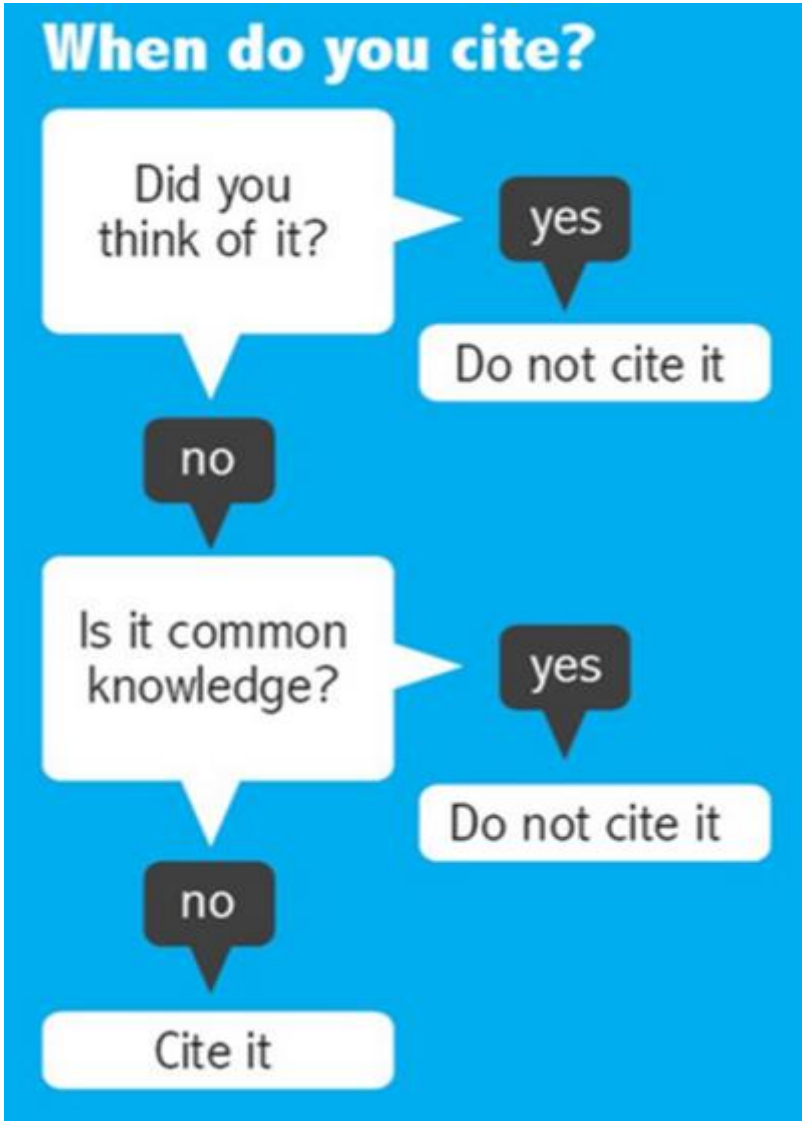
Physics Education Research Guide- may be helpful for TAs

Harvard Guide to Avoiding Plagiarism

Rutgers Plagiarism Policy

Avoiding Plagiarism handout
UNC Chapel Hill

Resources for Preventing Plagiarism University of Washington Libraries



Harris, Robert A. The Plagiarism Handbook: Strategies for Preventing, Detecting, and Dealing with Plagiarism. Los Angeles: Pyrczak Publishing, 2001.

Citation Managers

Comparing Zotero, Mendeley, and Endnote Web

Citation Management Tools available through Rutgers Libraries

LaTex Basics for Students

Did you know…

Rutgers University Libraries have data experts ready to help you with:

- **Data Management Plans**
- **Guidance on Access and Preservation of Research Data**
- **Data Management Best Practices**

We can help you

Keep up with Federal requirements for public access to research data

EXECUTIVE OFFICE OF THE PRESIDENT
OFFICE OF SCIENCE AND TECHNOLOGY POLICY
WASHINGTON, D.C. 20502

October 31, 2016

Dear Senate and House Appropriations Committees:

This letter is submitted in fulfillment of report language incorporated by reference in Division B of the Explanatory Statement for the Consolidated Appropriations Act, 2016, Public Law No. 114-113. That statement directs the Office of Science and Technology Policy (OSTP) to report on progress at each Federal department and agency in developing, finalizing, and implementing a plan to increase public access to the results of Federally-funded scientific research. This letter provides an update since my July 2016 report to you on the progress that Federal departments and agencies have made in response to an OSTP policy memorandum issued in February 2013 on *Increasing Access to the Results of Federally Funded Scientific Research.*[1]

The February 2013 OSTP memorandum directed each Federal agency with more than $100 million in annual expenditures for conduct of research and development to develop a plan to support increased public access to the results of Federally-funded research, specifically to scholarly publications and digital data resulting from such research. Since my last report to you

Federal Requirements Timeline

2003 NIH Data Management Statement

2005 NIH public access to research data

2011 NSF two page Data Management Plan

2013 OSTP public access to data for agencies with R&D > $100 M

2016 19 Federal Departments and Agencies have completed public access plans

We can help you

Create or advise on Data Management Plans for Federal Agencies

NSF Data Management Plans

An **NSF DMP consists of 5 components**, which describe:

- **Products of research:** spectra, diffraction patterns, physical properties, computational strategies, software, numerical results, etc.

- **Data Format:** instrument output, html, file types- .jpg, .tif... Conversions may be necessary. File names and versions should be standard. Metadata is required.

- **Access to Data and Data Sharing Practices and Policies:** how your data will be made freely accessible. Websites, HEP Data, SIMBAD Astronomical Database…

DMP components

- **Policies for Re-Use, Re-Distribution, and Production of Derivatives:** Who will be able to use your data? Will there be disclaimers on your website? Conditions concerning publication?

- **Archiving of Data:** How will it be preserved? Will hardcopies be transferred to digital format? Will digital media be migrated? Software? How long will the data be retained?

This is a simplified list from NSF - see your directorate https://www.nsf.gov/staff/orglist.jsp

We can help

Provide resources for data management preservation and access

Recommended Data Repositories

Scientific Data mandates the release of datasets accompanying our Data Descriptors, but we do not ourselves host data. Instead, we ask authors to submit datasets to an appropriate public data repository. Data should be submitted to discipline-specific, community-recognized repositories where possible, or to generalist repositories if no suitable community resource is available.

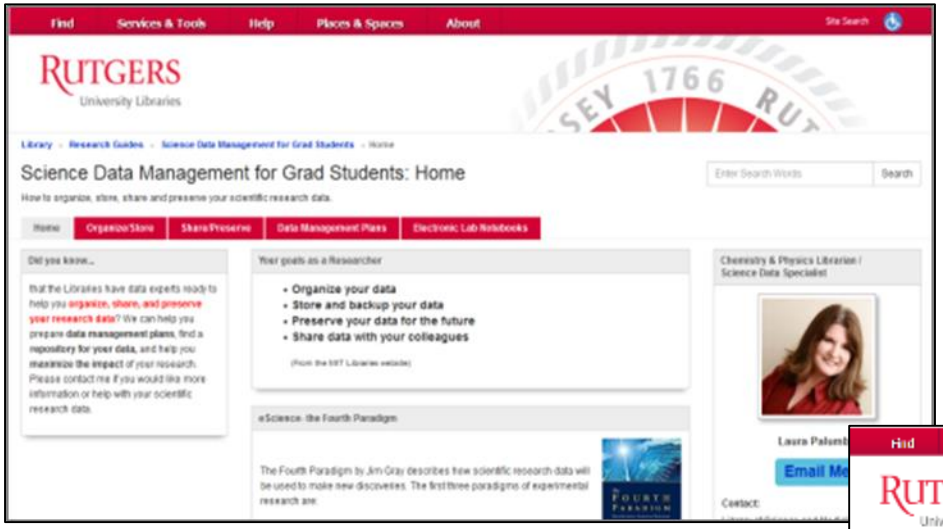
Repositories included on this page have been evaluated to ensure that they meet our requirements for data access, preservation and stability. Please be aware, however, that some repositories on this page may only accept data from those funded by specific sources, or may charge for hosting data. Please ensure you are aware of any deposition policies for your chosen repository. If your repository of choice is not listed please see our guidelines for suggesting additional repositories.

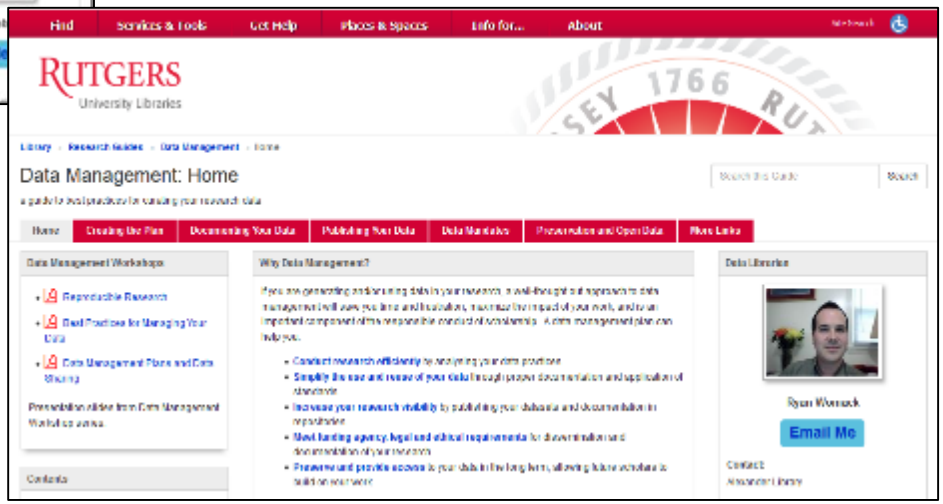
Authors must deposit their data to a recommended data repository as part of the manuscript submission process; manuscripts will not otherwise be sent for review. If data have not been deposited to a repository prior to manuscript submission, authors can upload their data to figshare or the Dryad Digital Repository during the submission process. Data may also be deposited to these resources temporarily, if the main host repository

Resources – Rutgers University Libraries

Research Guides- Science Data for Grad Students

http://libguides.rutgers.edu/grad_sciencedata

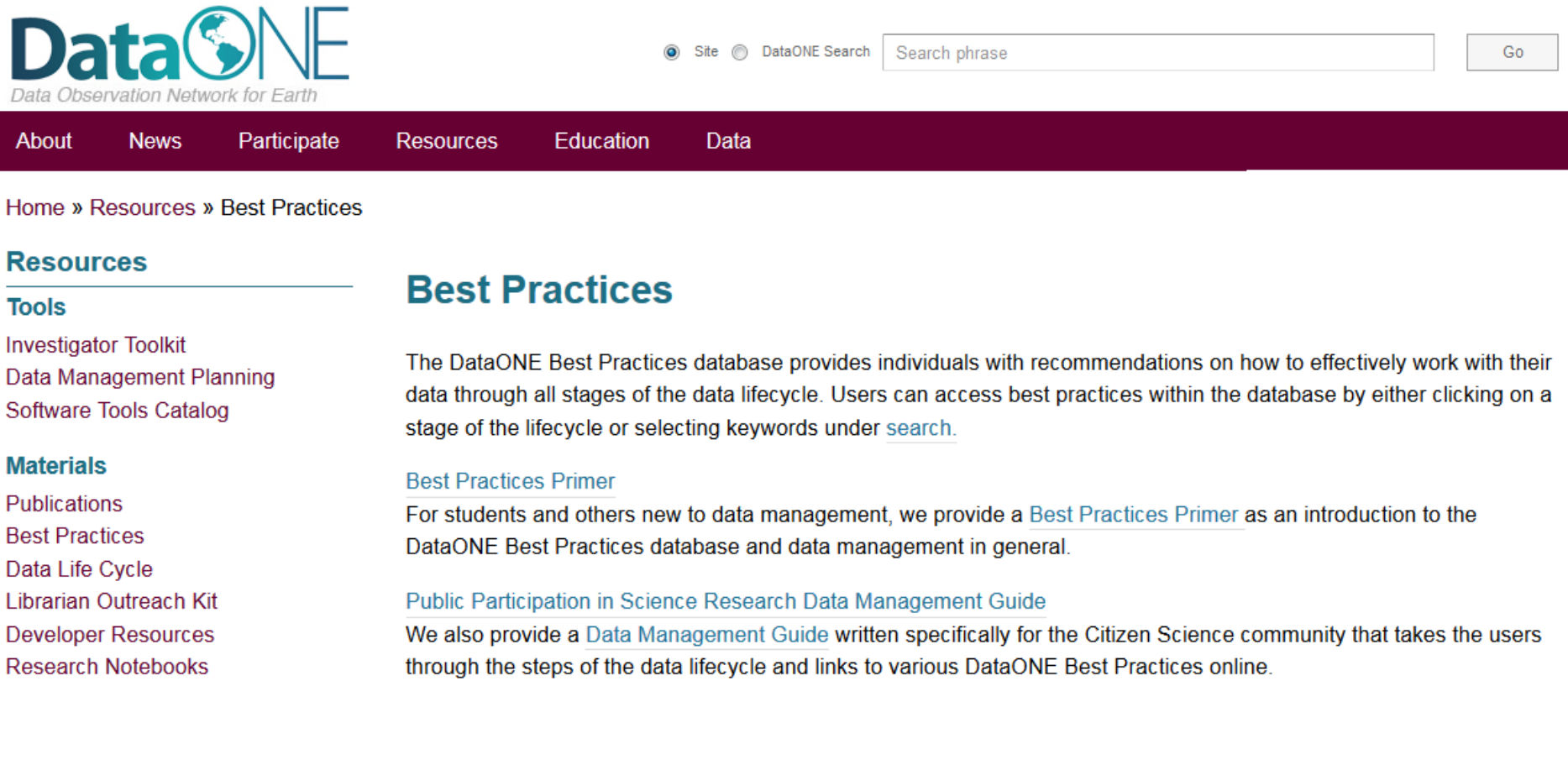




RUTGERS

We can help you with

Good Data Management practices



Would someone else be able to find your work?

- Cite your data: Digital Object Identifiers
- Register for an ORCID id:

  Open **R**esearcher and **C**ontributor **ID**

  What is ORCID?

  Register for an ORCID id

  http://orcid.org

Image from orcid.org

Thank you!

laura.palumbo@rutgers.edu
@LauraBPalumbo