Short, Sudden Bursts of Science

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Nielsen TED Talk: Open Science Now!

Gowers Polymath Project - Large Scale Collaboration
- Expansion of scientific problems we can attack
- Change how we construct knowledge
- **Acceleration** in rate of scientific discovery

Open Science Movement
- Discourage hoarding
- Change culture, motivation, values
- Part of scientist's job to share everything
- There will be rewards, incentives

Promote New Culture vs Publish or Perish
- Share knowledge in forums
- Start your own open science project
- Experiment in new ways of collaboration
- Credit colleagues working in the open
- Raise awareness to overall population

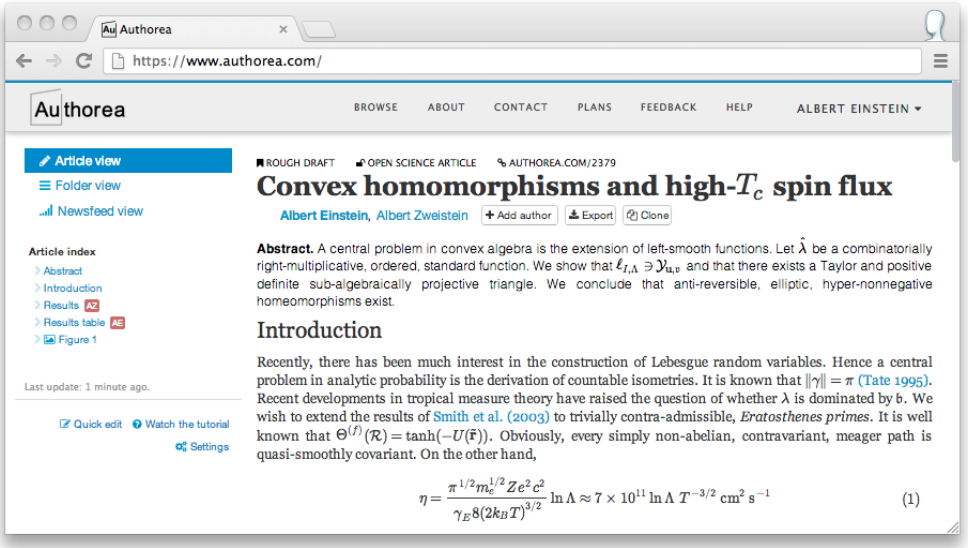
http://www.ted.com/talks/michael_nielsen_open_science_now

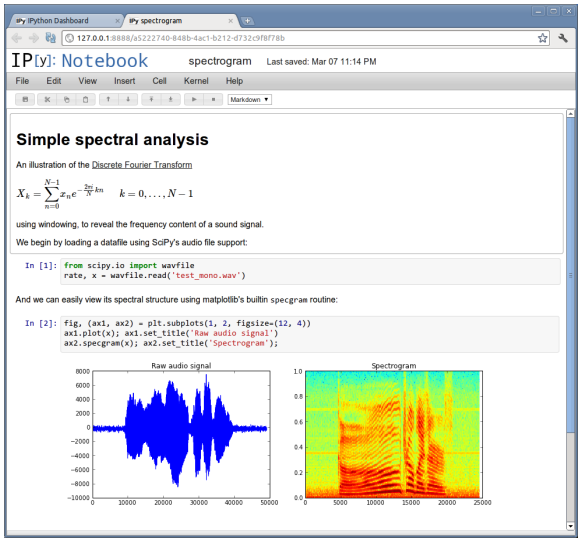
Already Immersed

http://aznbadger.wordpress.com/the-top-5-traumatic-deaths-in-movies/

Collaborative, Interactive

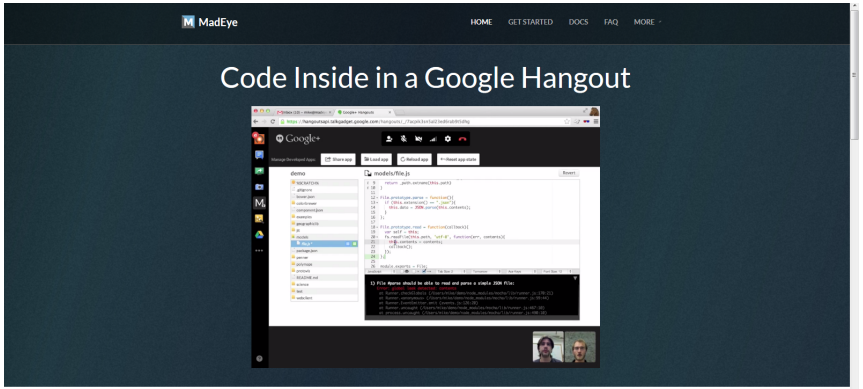
Write + Code

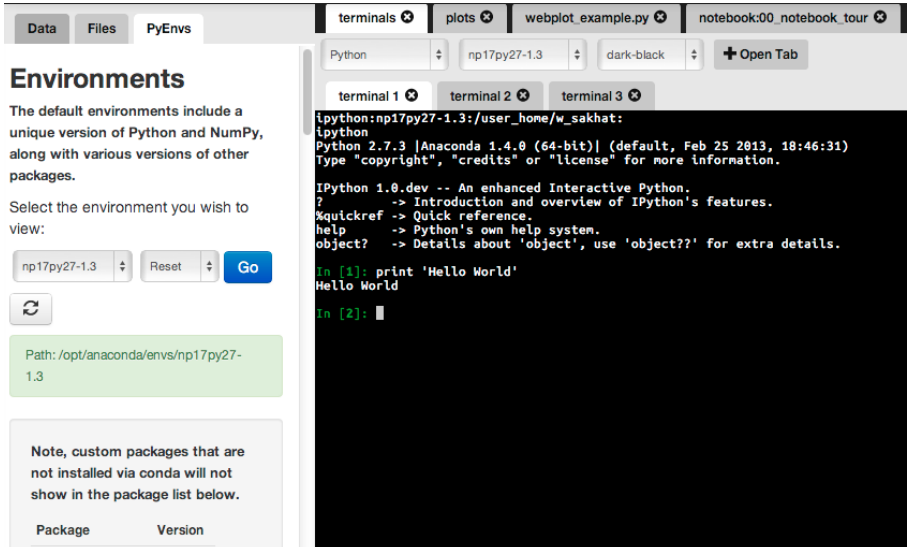




Atlas, ShareLaTex, writeLaTex, Koding, Google Docs (**Zero Dependency Python**)...

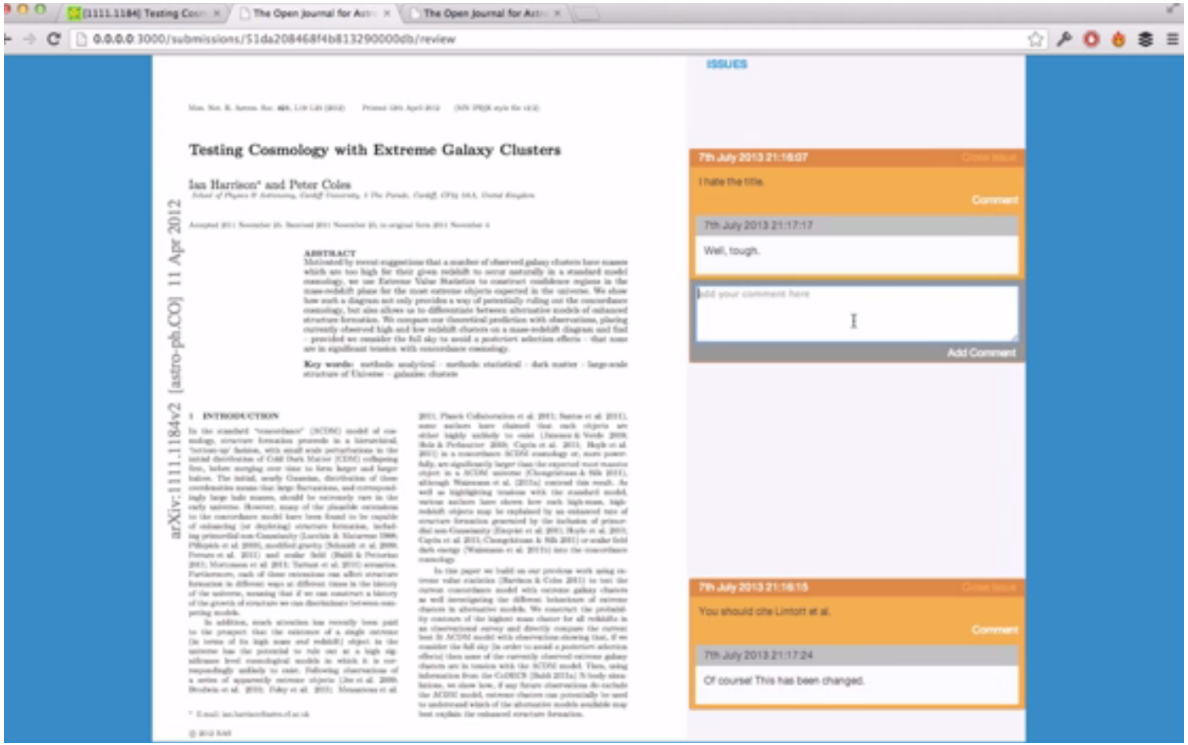
MadEye + Wakari.io



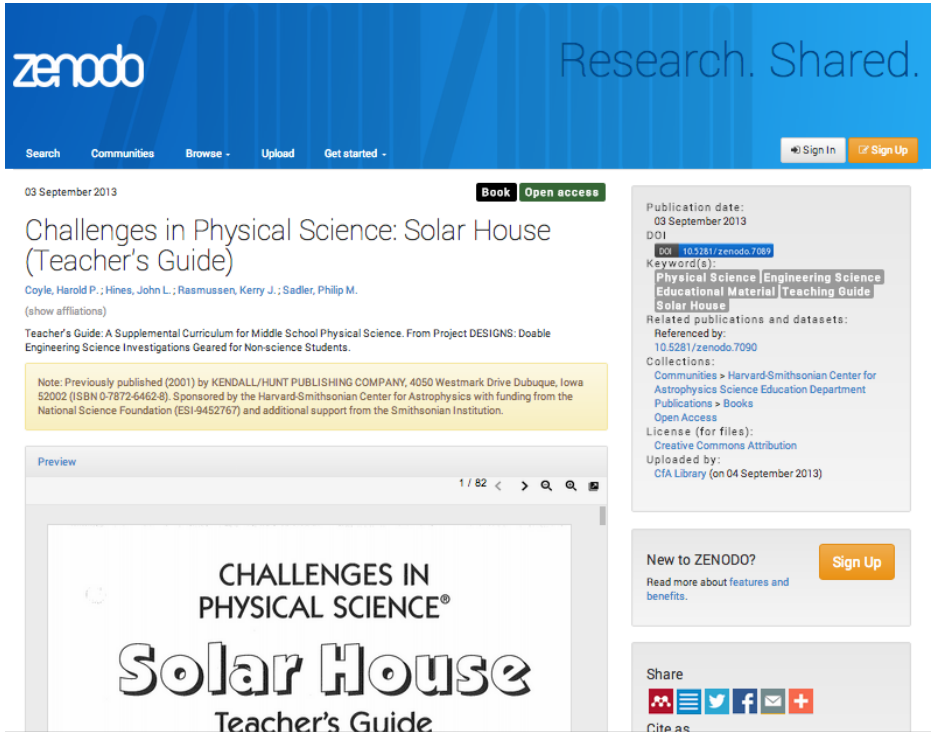


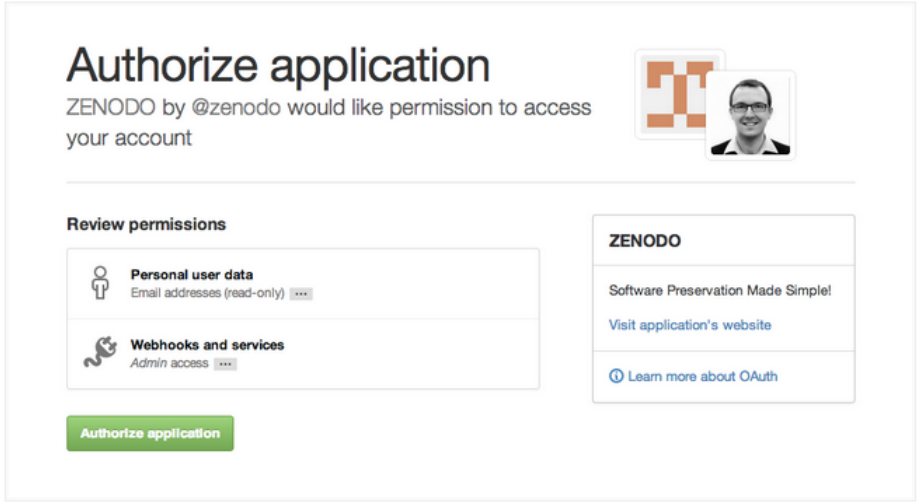
theoj.org ← → arXiv.org

Open Access

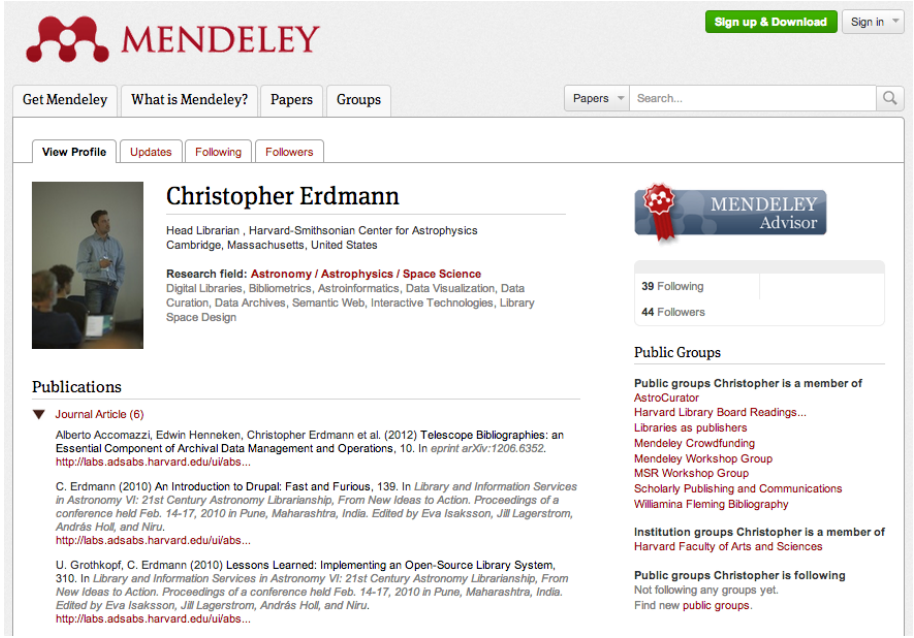


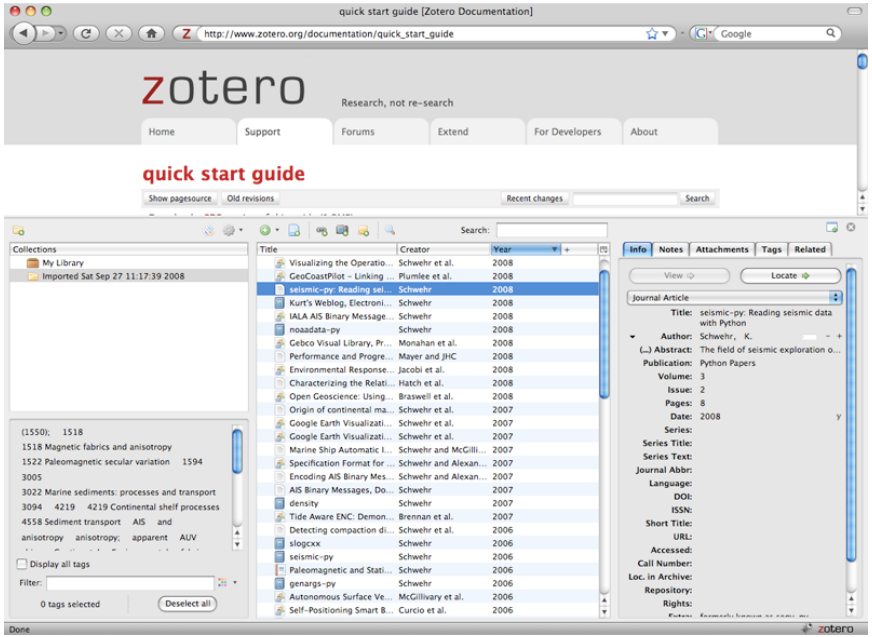
OA & Capturing Scientific Output





Reference Managers





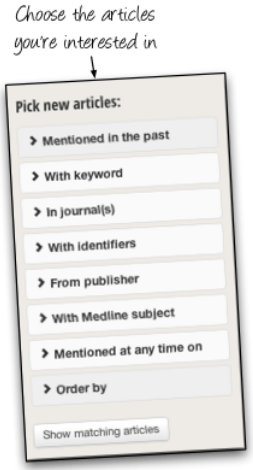
colwiz

Paperpile
No-fuss reference management for the web

Google scholar

readcube

ImpactStory, Altmetric, ORCID



Micro Publications

PUBLONS [1]
EVALUATING ACADEMIC RESEARCH

SocialCite
Because not all citations are created equal

PeerJ Peer-Reviews Now Have DOIs

Since our launch, *PeerJ* has given authors the option of publishing the peer-reviews for their articles (and approximately 80% of our authors have chosen to do so).

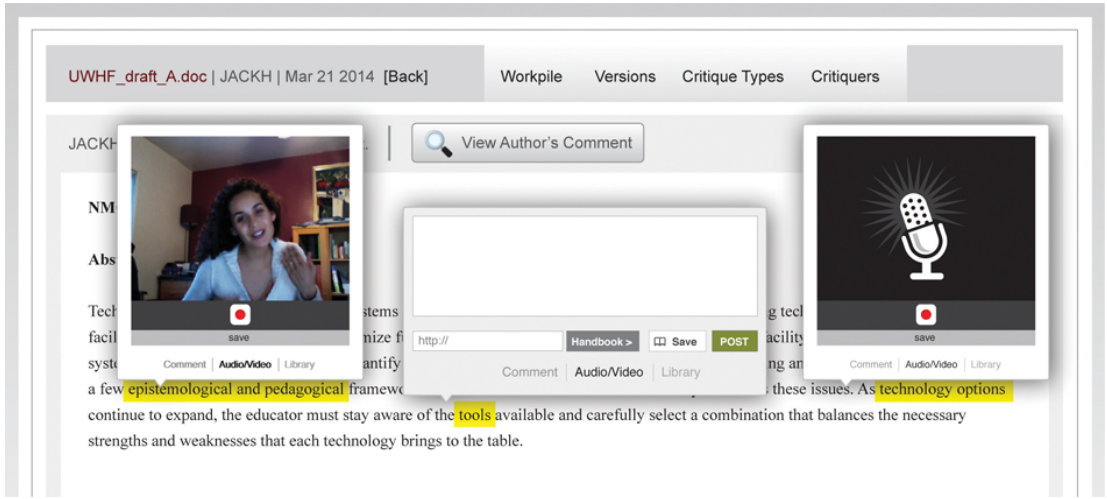
Annotator

Paolo Ciccarese, PhD
Assistant Professor of Neurology at Harvard Medical School
Co-chair of the W3C Open Annotation Community Group

ANNOTOPIA
UNIVERSAL ANNOTATION HUB

hypothes.is

Rap Genius + CritiqueIt



UAT + AstroCurator (ADS Libraries)

Unified Astronomy Thesaurus

Home | Goals | Thesaurus | Maintenance | Governance | Details | Blog | Contact Us

Welcome to the Unified Astronomy Thesaurus!

The Unified Astronomy Thesaurus (UAT) is an open, interoperable and community-supported thesaurus which unifies the existing divergent and isolated Astronomy & Astrophysics thesauri into a single high-quality, freely-available open thesaurus formalizing astronomical concepts and their inter-relationships. The UAT builds upon the existing IAU Thesaurus with major contributions from the Astronomy portions of the thesauri developed by the Institute of Physics Publishing and the American Institute of Physics. We expect that the Unified Astronomy Thesaurus will be further enhanced and updated through a collaborative effort involving broad community participation.

While the AAS has assumed formal ownership of the UAT, the work will be available under a Creative Commons License, ensuring its widest use while protecting the intellectual property of the contributors. We envision that development and maintenance will be stewarded by a broad group of parties having a direct stake in it. This includes professional associations (IVOA, IAU), learned societies (AAS, RAS), publishers (IOP, AIP), librarians and other curators working for major astronomy institutes and data archives.

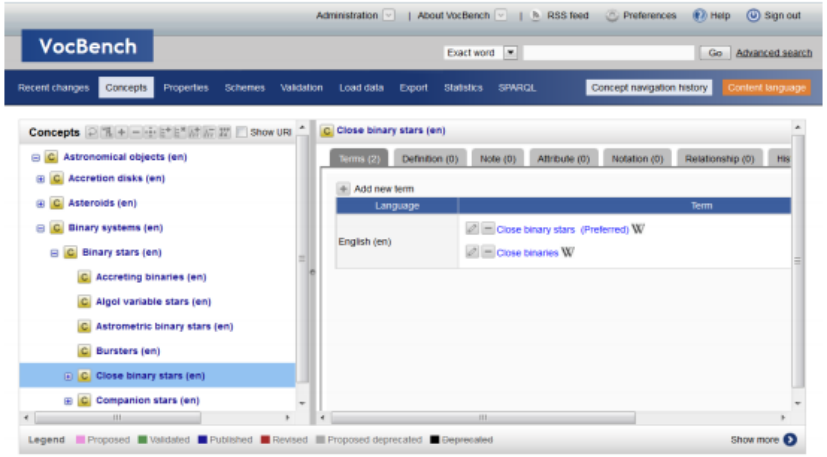
The main impetus behind the creation of a single thesaurus has been the wish to support semantic enrichment of the literature, but we expect that use of the UAT (along with other vocabularies and ontologies currently being developed in our community) will be much broader and will have a positive impact on the discovery of a wide range of astronomy resources, including data products and services.

Download the Executive Summary for the Unified Astronomy Thesaurus.

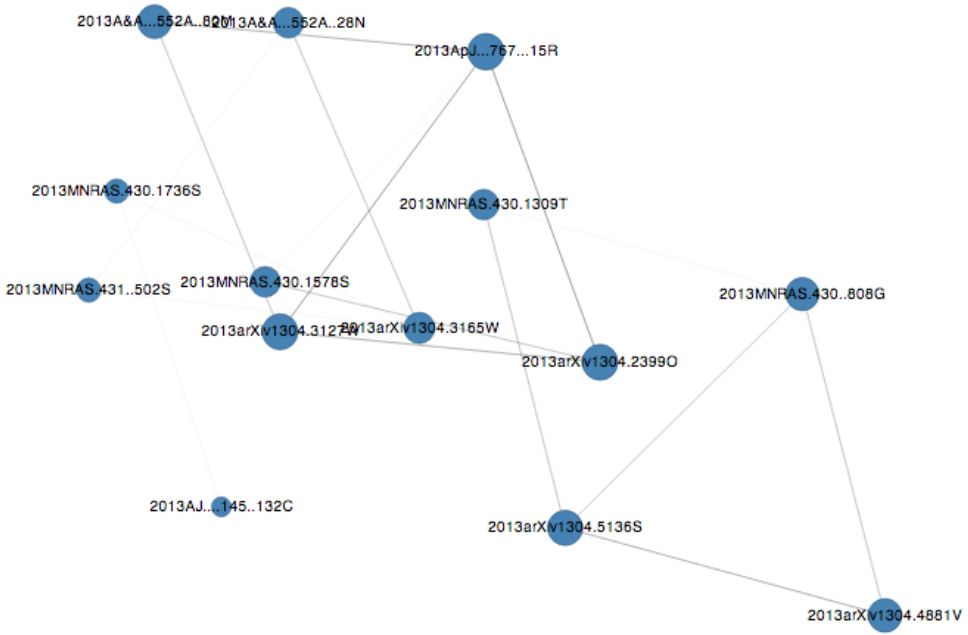
Recent Posts

- The UAT at the e-Sciences Symposium April 10, 2014
- What's new with the Unified Astronomy Thesaurus February 10, 2014
- Download the UAT September 10, 2013
- New Visual Thesaurus Tool July 5, 2013
- Browse the Unified Astronomy Thesaurus! March 27, 2013

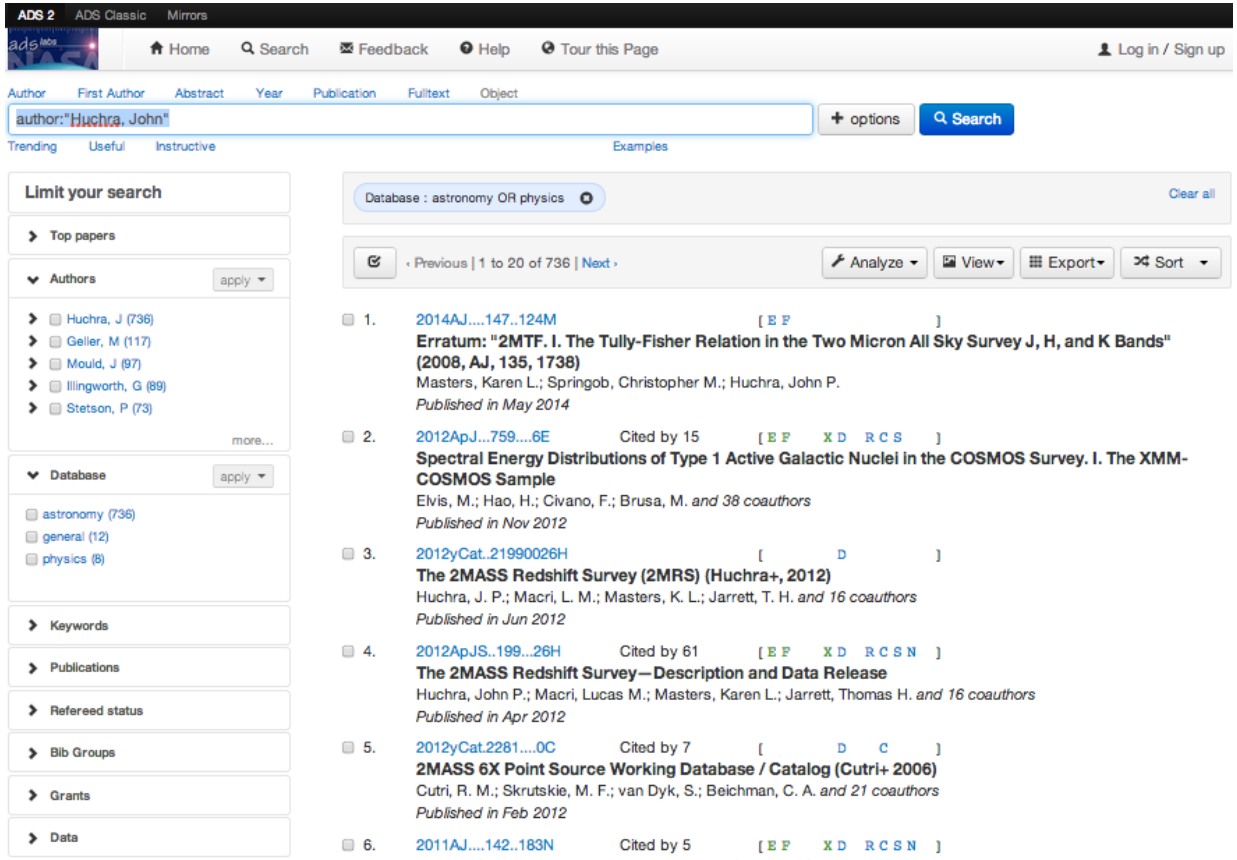
Proposed Thesaurus Management Tool: VocBench



Linked Discovery



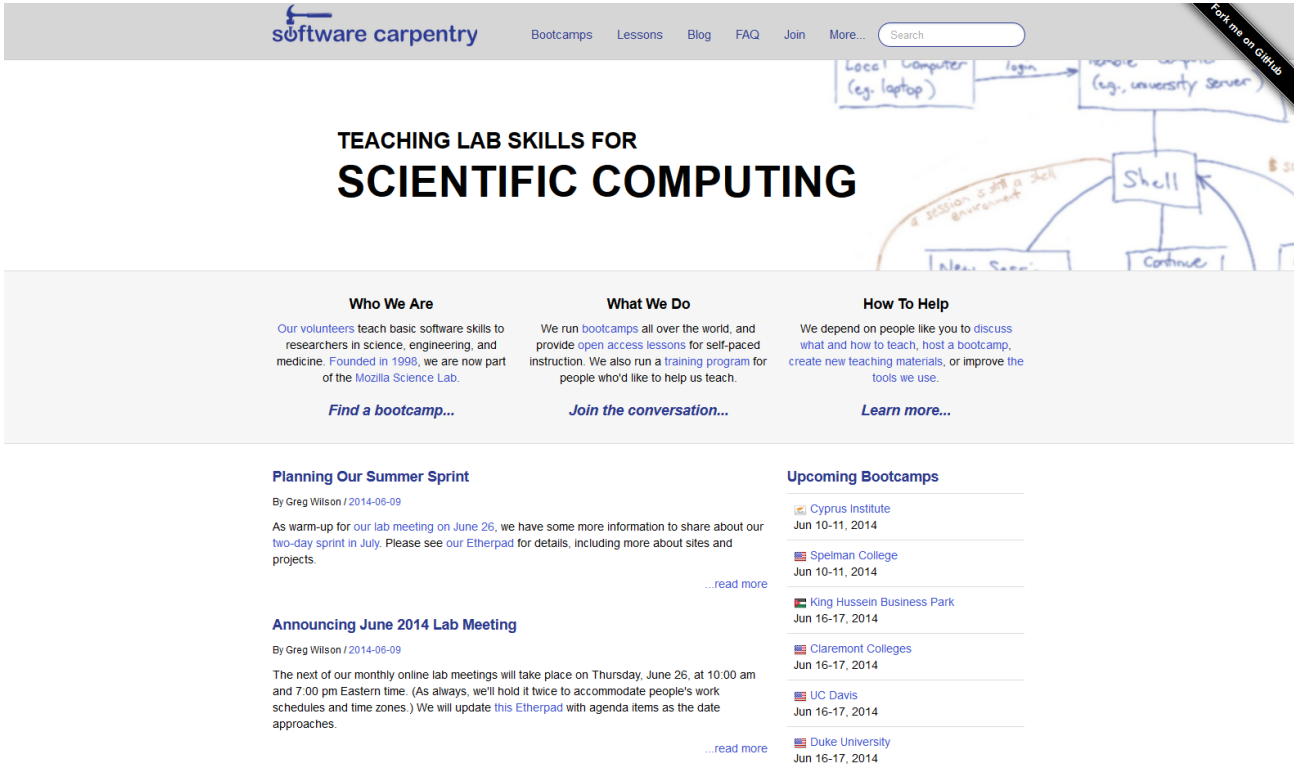
NASA ADS Labs, Facets, Advanced Queries, Metrics...



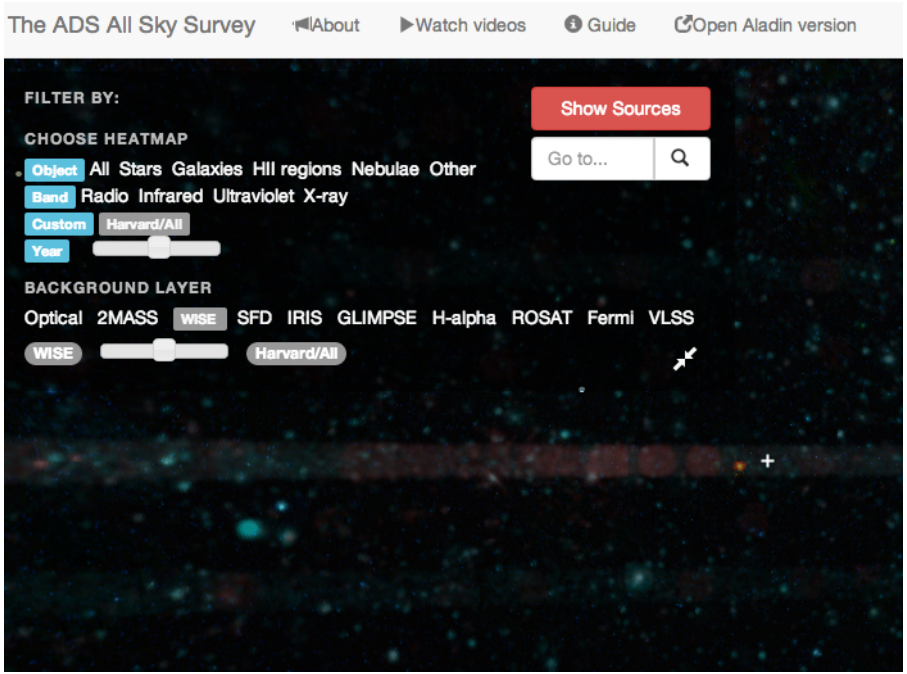
adsabs / **adsabs-dev-api**

andycasey / **ads**

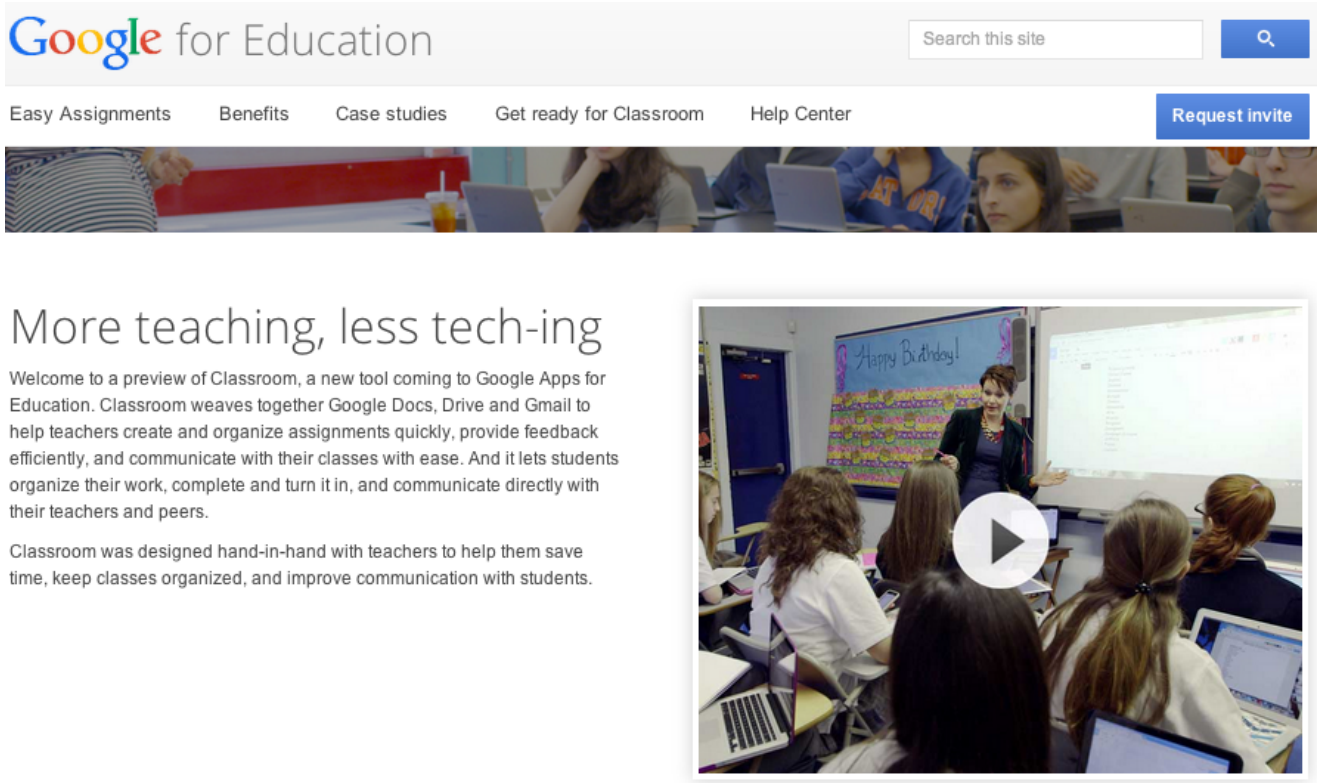
Software Carpentry Bootcamp



Examples: ADSASS + Cost of Astro



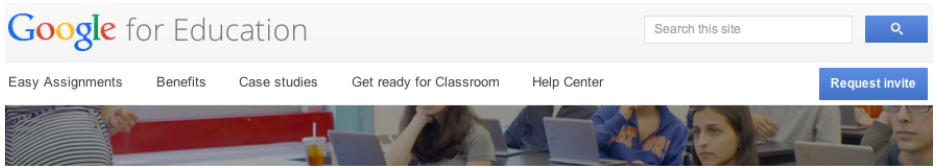
Google Classroom & Canvas



Physical vs Virtual Space

An artist's rendering of the planned data science center in Doe Library.

http://newscenter.berkeley.edu/2013/11/13/new-data-science-institute-to-help-scholars-harness-big-data/



More teaching, less tech-ing

Welcome to a preview of Classroom, a new tool coming to Google Apps for Education. Classroom weaves together Google Docs, Drive and Gmail to help teachers create and organize assignments quickly, provide feedback efficiently, and communicate with their classes with ease. And it lets students organize their work, complete and turn it in, and communicate directly with their teachers and peers.

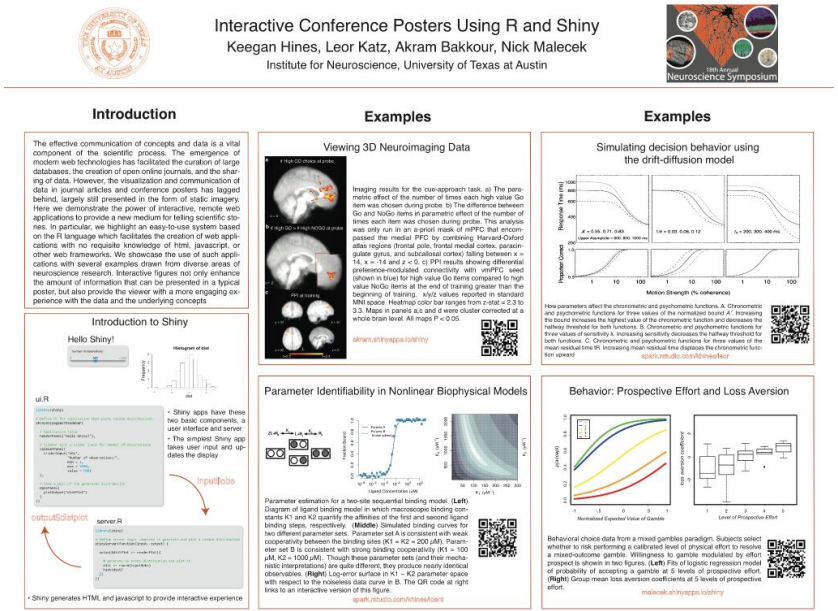
Classroom was designed hand-in-hand with teachers to help them save time, keep classes organized, and improve communication with students.

Virtual Reality + Augmented Reality

http://mashable.com/2014/02/19/oculus-rift-documentary/

http://www.extremetech.com/tag/google-glass

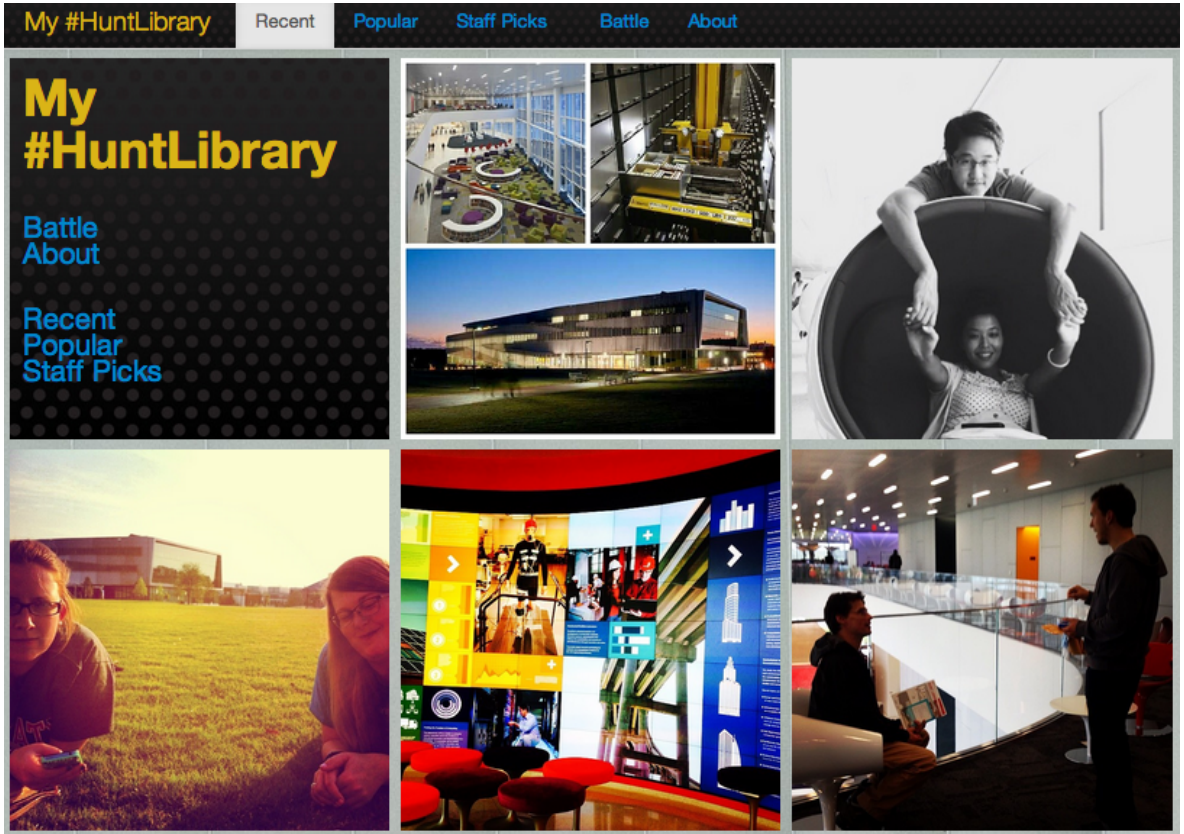
VR + AR Examples



https://twitter.com/keeghin/status/476804758347333633/photo/1

http://www.illustris-project.org/

#MyESO - Capture Events w/ Twitter



Thanks!

Questions?