

Let's go PhySH'ing

AAHEP, Cornell University

October 31, 2018

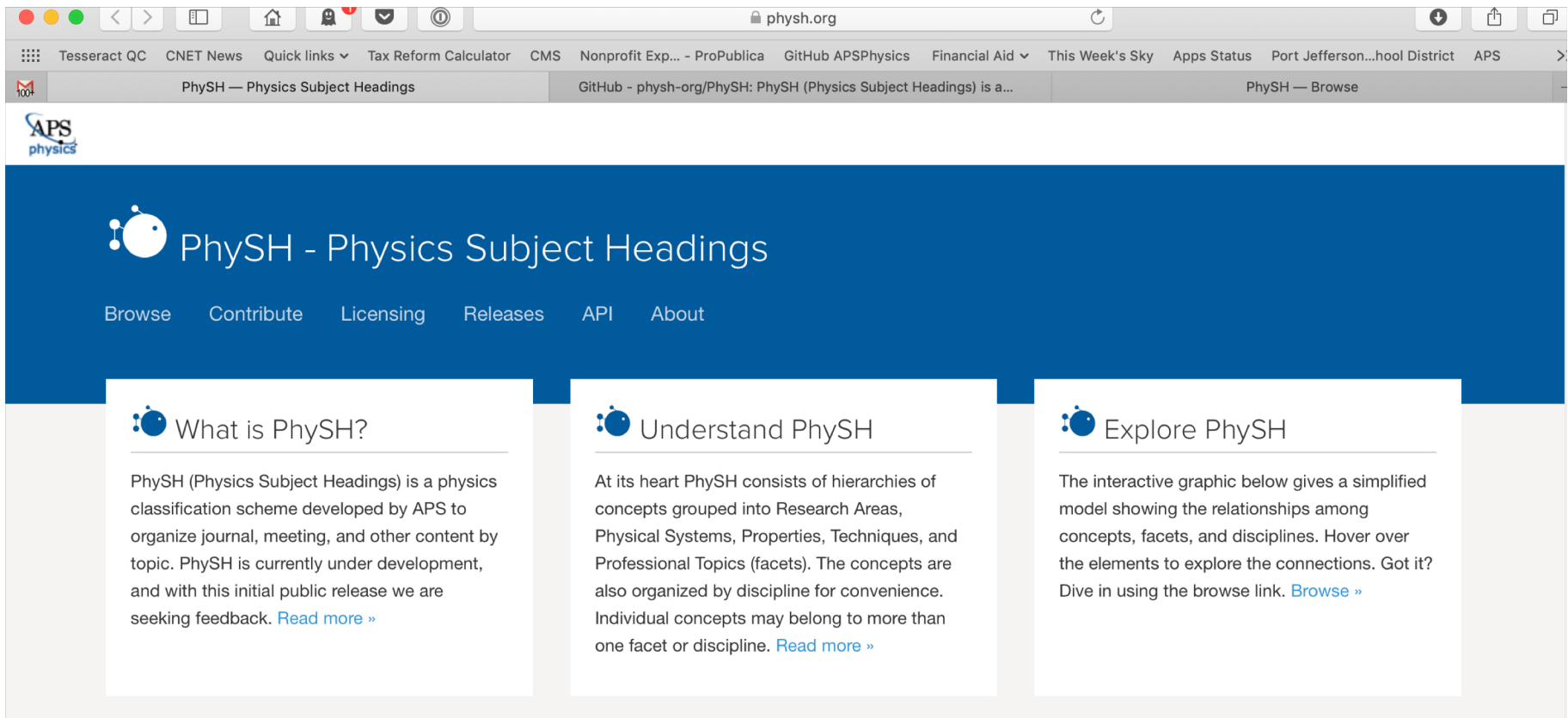
Mark Doyle, Chief Information Officer
American Physical Society

PhySH – Physics Subject Headings

- Faceted taxonomy
 - Research Areas
 - Physical Systems
 - Properties
 - Techniques
 - Professional Topics
- Use 'Disciplines' to provide cross-cutting view
- About 3200 concepts
- REST API for facets, disciplines, concepts

What's New?

- Sept 2018: PhySH 1.0 released under CC0 license: <https://physh.org> and <https://github.com/physh-org/PhySH>
- DOI for each concept: <https://doi.org/10.29172/<uuid>>
- SKOS, TTL, RDF
- Open for collaboration/feedback



The image shows a browser window displaying the website physh.org. The browser's address bar shows the URL physh.org. The page title is "PhySH - Physics Subject Headings". The navigation menu includes "Browse", "Contribute", "Licensing", "Releases", "API", and "About". The main content area features three columns:

- What is PhySH?**

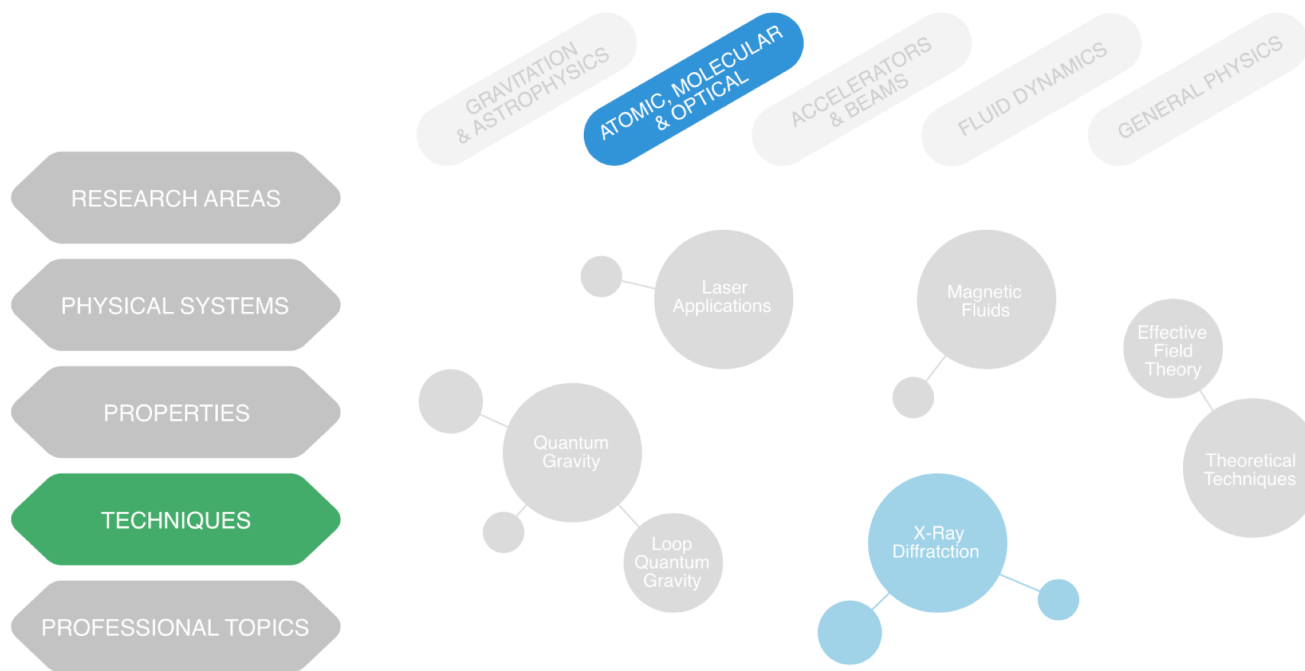
PhySH (Physics Subject Headings) is a physics classification scheme developed by APS to organize journal, meeting, and other content by topic. PhySH is currently under development, and with this initial public release we are seeking feedback. [Read more »](#)
- Understand PhySH**

At its heart PhySH consists of hierarchies of concepts grouped into Research Areas, Physical Systems, Properties, Techniques, and Professional Topics (facets). The concepts are also organized by discipline for convenience. Individual concepts may belong to more than one facet or discipline. [Read more »](#)
- Explore PhySH**

The interactive graphic below gives a simplified model showing the relationships among concepts, facets, and disciplines. Hover over the elements to explore the connections. Got it? Dive in using the browse link. [Browse »](#)

PhySH concepts are organized by facets and disciplines

[More Detail](#)



Browse PhySH

DISCIPLINES

- Accelerators & Beams
- Atomic, Molecular & Optical
- Biological Physics
- Condensed Matter & Materials Physics
- Fluid Dynamics
- General Physics
- Gravitation, Cosmology & Astrophysics
- Interdisciplinary Physics
- Networks
- Nonlinear Dynamics
- Nuclear Physics
- Particles & Fields
- Physics Education Research
- Plasma Physics
- Polymers & Soft Matter
- Quantum Information
- Statistical Physics

SHOW MORE

- Include all related concepts
- Include all narrower concepts

Research Areas

Physical Systems

Properties

Techniques

Professional Topics

All

Beam dynamics

Show 11 Narrower

Cosmology

Show 14 Narrower

Electromagnetic radiation astronomy

Show 6 Narrower

Gravitation

Show 7 Narrower

Particle astrophysics

Show 3 Narrower

Radio frequency techniques

Show 4 Narrower

Transient & explosive astronomical phenomena

Show 4 Narrower

Beam techniques

Show 7 Narrower

Cryogenics & vacuum technology

Show 2 Narrower

Electroweak interaction

Show 4 Narrower

Hydrostatic stellar nucleosynthesis

Show 2 Narrower

Particle phenomena

Show 4 Narrower

Strings & branes

Show 6 Narrower

Cosmic rays & astroparticles

Show 7 Narrower

Electromagnetic field calculations

Show 2 Narrower

Formation & evolution of stars & galaxies

Hypothetical particle physics models

Show 7 Narrower

Quantum field theory

Show 34 Narrower

Strong interaction

Show 5 Narrower

What's Next?

- Full searching by PhySH on APS journal platform
- Subject-based, cross-journal browsing
- Ongoing cycle of review
 - Fluid Dynamics currently under review
- GraphQL API
- Open to partnerships and collaborations on specific areas