



Director's Matters

Illuminating manuscripts

Scholarly journal publishers take pride in adopting web technologies for continuously improving the efficiency of the journal production process, the richness of the content, and the dissemination methods. For example, the composition language XML, which is used to represent the digital version of a manuscript, allows all sorts of useful data to be associated, or "tagged," with the article text and bibliographic data. This optimizes the search function, allowing authors, reviewers, and editors to efficiently locate topics or references in the manuscript. As we evolve the user interface on Scitation, AIP's online platform for journals and other publications, our publishing staff is adding useful pull-down menus of information related to the manuscript under study. We regard these online features as significant improvements in utility over hard copy—or are we really being a little smug? It turns out a precedent for such innovations existed well before the arrival of Gutenberg's press.

One of civilization's first needs for printed information was a compendium of laws to establish basic rules of conduct. In the fourth century, the Roman emperor Justinian brought into existence the first opus of Roman law, the *Corpus Juris Civilis* (Body of Civil Laws). Unfortunately, the manuscript has been lost since 603. However, some nameless soul produced a summary of the document, called the *Digest*—which may be the first example of an abstracting service at work. Unfortunately for the inhabitants of Europe's Middle Ages, only two copies of the *Digest* were known to have survived, and their whereabouts were unknown for four centuries.

An Italian liberal arts teacher, Irnerius, found a copy of the *Digest* while working in the Royal Law School in Ravenna, Italy in 1076. The *Digest* was a very complex document about an empire that had little bearing on Europe at the end of the first millennium. However, Irnerius' gift to Western civilization was his subsequent editorial work. He meticulously "tagged" the *Digest* by adding a series of explanatory notes in the margins and between the lines of the manuscript. (These are easily seen in the beautiful page that is illustrated here from the tagged version produced in 1076.)

Irnerius's version of the *Digest* became the basis of a teaching system he founded in the nearby monastery of St. Stephen. As expounded by my favorite British scholar of Italian literature and history of science, James Burke,¹ Irnerius urged his teachers to produce the following aids for their scholars: "summulae (notes summing up whole areas of law), continuationes (summaries of different groups of laws), and distinctiones (variations on the hypothetical cases described)." If you substitute the subject of "physics" for "law" in these teaching aids, you will find something similar to the superb new website, [Physics](#),

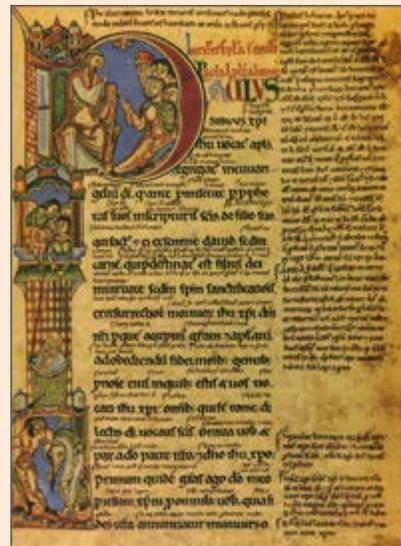


Photo credit: The Bodleian Library

launched by APS last September to explain and summarize the best manuscripts appearing in the Physical Review suite of APS publications.

We think we are very smart, but it pays student and publisher alike to check the literature!

1. James Burke, *The Day the Universe Changed*, Little, Brown and Company, Boston, 1985, p. 33-36.

Sincerely,

Fred

Publishing Matters

UKSG—connecting the information community

What does the scholarly journal market look like from the other side of the pond? Recently, John Haynes, vice president of publishing, and Doug LaFrenier, director of publication sales and market development, attended the [32nd annual meeting](#) of the [United Kingdom Serials Group](#), held in the seaside resort town of Torquay, UK. The UKSG meeting—well attended by librarians, publishers, and vendors—offers a rare opportunity to meet and mingle with people from all corners of the scholarly publishing industry. Conference topics included open access, the academic market for e-books, how technology is changing university learning, and consortia buying in today's economy. John and Doug met with customers from the UK, Russia, and Denmark; with sales agents that represent AIP in Scandinavia and elsewhere; with business collaborators such as [Ringgold](#) and [DataSalon](#); and with executives of the two major subscription agencies, [EBSCO](#) and [Swets](#). Social events and dinners provided ample opportunity to network and build relationships.

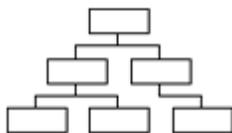
Physics Resource Center Matters

Broadening participation in research careers: What works?

Rachel Ivie of the Statistical Research Center served on the planning committee for the [Third Annual Conference on Understanding Interventions that Broaden Participation in Research Careers](#), held May 7-9 in Bethesda, MD. The conference, which is funded by NIH, AAAS, and the American Society for Cell Biology, recently expanded to include physical sciences. Speakers shared results from hypothesis- and theory-driven research to document what works in retaining women and minorities in science at all levels. This research can be used to improve diversity in science departments and workplaces. Proceedings from the first two conferences are available now, and those from the third will be available within the year. For more information, contact [Rachel Ivie](#).

Around AIP

Who we are—Statistical Research Center



The Statistical Research Center (SRC), directed by Roman Czujko, (see the [AIP organizational chart](#), page 58) provides unique services to the physics community. The core of the SRC's research agenda is to collect, analyze, and disseminate data on education and employment in physics and related disciplines.

The SRC conducts surveys on all aspects of physics education from high school through the PhD. It also covers employment of physicists and related scientists from initial employment through retirement. The SRC's first annual survey series began in 1961; these studies continue to document the number of student enrollments in, and

degrees awarded by, physics departments.

Over the past 20 years, the SRC has expanded its mission to include providing research and statistical services to other AIP units and AIP Member Societies. In the past two years, the SRC has conducted studies for AAPM, AAPT, APS, AGU, OSA, and AAS. Within AIP, the SRC has also recently assisted *Physics Today*, the Society of Physics Students, the Publishing branch, and Industrial Outreach.

The reputation of the SRC continues to grow; the center now provides research services to related disciplines beyond the AIP family. Over the past two years, the SRC has completed studies for NIST, the American Association of Medical Dosimetrists, the American Sociological Society, and the American Association of Arts and Sciences.

It is remarkable to note that the number of SRC staff has remained unchanged for 18 years, yet the group conducts three times as many surveys each year.



Back row, from the left: Jason Mendez, Kenny Harris, Julius Dollison, Patrick Mulvey, Garrett Anderson, Brandon Shindel. Front rows, from the left: Starr Nicholson, Karen Kaleuati, Susan White, Sarah Abedi, Arnell Ephriam, Ray Chu, Casey Tesfaye, Roman Czujko, and Judith Mulvey

Rachel Ivie and Mark McFarling

We invite your feedback to this newsletter via e-mail to aipmatters@aip.org.

For past issues of this newsletter, visit the [AIP Matters archives](#).