ArXiv survival tied to new funding model

The keepers of arXiv, the physics community's most popular eprint server, are trying to gather financial contributions from society journal publishers and academic institutions that use it. The aim is to lessen arXiv's dependence on the Cornell University library, which has maintained the website since 2001, when it moved with its founder, physicist Paul Ginsparg, from Los Alamos National Laboratory.

"My rough understanding," says Ginsparg, "is that in this current era of declining university budgets across the board, it's difficult for the library to maintain an indefinite commitment to unilateral support of a resource which provides so much benefit outside of the university."

Last year alone, arXiv had more than 30 million downloads, 400 000 registered users, and 65 000 papers submitted in a wide range of disciplines including astronomy, chemistry, high-energy physics, and theoretical physics. "The usage levels, submission rates, external enthusiasm, visibility, impact, et cetera continue to grow unabated," says Ginsparg. "So it's useful to assess whether this can be made a community-supported resource in the long term."

Simeon Warner, who is in charge of arXiv's day-to-day operations, says that the current business proposal is to ask the top

institutions in usage to pay a voluntary tiered subscription fee. Invoices for 2010 went out last month. The top 100 institutions pay \$4000; the next 100, \$3200; and the remainder, \$2300. That revenue would reduce the library's current \$400 000 annual commitment in salaries, server costs, and upgrades from 75% of arXiv's total cost in 2010 to 15% by 2013.

More than two dozen institutions pledged to provide support for 2010 before the plan went public, says Warner, and "we have had several spontaneous pledges since then." Institutions that do pay will be recognized for their support through banners and the provision of detailed usage statistics for the donors. Warner is aiming to raise \$425 000 annually by 2013 from outside sources.

The multi-institution donation proposal is a transitional option until a more sustainable business model can be implemented with more input from the physics community, says Warner. The American Physical Society and the American Institute of Physics (which publishes Physics Today) had high-level discussions with Warner and Ginsparg about arXiv last summer. Says Warner, "We believe that a more diverse funding model will likely be better."

sets." OSTP complied by providing links to previously unreleased details of federal R&D spending on information technology, nanotechnology, and climate change. Among NSF's offerings were a Freedom of Information Act report for fiscal year 2008 and a list of its graduate research fellowship awardees from 2000 through 2009. And the US

Department of Energy provided seven data sets, including lists of patents resulting from agency-sponsored research and summaries of energy-related scientific projects performed by national laboratories and other facilities since 1995.

For its part, the roundtable implicitly accepts that free public access has

benefits and will become ubiquitous throughout government. Indeed, its report invites other research-sponsoring agencies such as NSF, NASA, and DOE to act quickly to put their own policies in place, in consultation with their stakeholders. The group also endorses the use of embargoes, though it is not specific on what the time limit should

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