

arXiv Scientific Advisory Board Annual Meeting

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September 2015



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arXiv Business Support and Governance Model

In January 2010, Cornell University Library (CUL) undertook a three-year planning effort to establish a long-term sustainable support model for arXiv, one that reduced arXiv's financial burden and dependence on a single institution and transitioned it to a collaboratively governed, community-supported resource. CUL identified institutions worldwide where the use of arXiv was most active and worked collaboratively with them to develop a membership and governance model based on voluntary institutional contributions. A formal long-term plan took effect in January 2013. In this new model, arXiv is supported by libraries and research laboratories worldwide that represent arXiv's heaviest users, as well as by CUL and generous matching funds from the Simons Foundation.

Please see the resources below for details about the arXiv support and governance model

General Information

- [arXiv Membership Program - FAQ](#)
- [Principles](#)
- [Organizational Structure](#)
- [Additional Information](#)

arXiv Governance and Business Model

- [Principles](#)
- [Scientific Advisory Board](#)
- [Member Advisory Board](#)
- [Business Model](#)
- For annual budgets, see [Additional Information](#)

arXiv Supporters and Users

- [arXiv Five-Year Member Pledges](#)
- [arXiv Planning Phase Supporters: 2010, 2011, 2012](#)
- [arXiv Institutional Usage Statistics: 2009, 2010, 2011, 2012, 2013, 2014](#)

<http://arxiv.org/help/support>

2

Pages / CUL Public Wiki @

arXiv Sustainability Initiative

Created by Oya Yildirim Rieger, last modified by Desiree C Alexander about 2 hours ago

Questions? Check out arXiv's sustainability initiative [FAQ](#) or email us at support@arxiv.org

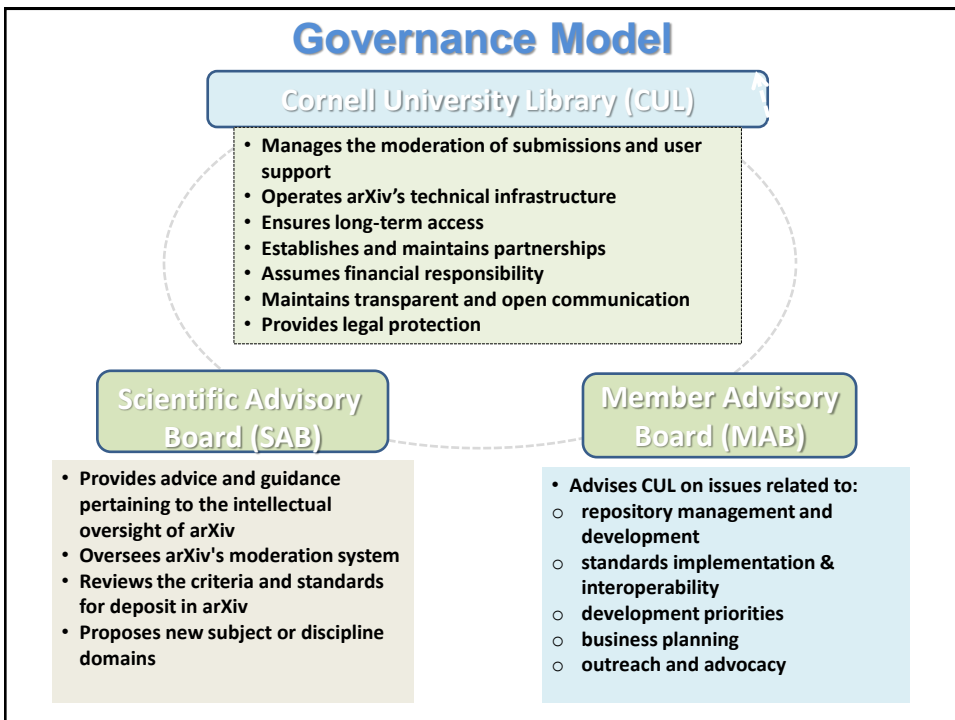
Governance & Business Model	arXiv Members
<ul style="list-style-type: none"> Principles and Business Model arXiv Organizational Structure MAB Bylaws SAB Bylaws arXiv budget (2014) arXiv budget (2015) 	<ul style="list-style-type: none"> arXiv Member Institutions arXiv Institutional Statistics (2014) arXiv MAB Work Space

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arxiv-support-updates-l-request@cornell.edu
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 Body of the message: join

Sustainability Planning Background Information (2010-current)

- arXiv Supporters: 2010, 2011, 2012 (business planning years prior to the 5-year membership model)
- arXiv Institutional Usage Statistics: 2009, 2010, 2011, 2012, 2013
- arXiv Support Updates:
 - July 2010, December 2010, April 2011, July 2011, October 2011, January 2012, January 2014, January 2015
- arXiv Budget:
 - CY 2010 Budget CY 2011 Budget CY 2012 Budget CY 2013 Budget CY 2014 Budget CY 2015 Budget
- arXiv Reserve Policy
- Roadmaps: 2013, 2014, 2015
- arXiv Sustainability Advisory Group (November 2010-April 2012)
- Interim Member Advisory Board
- Member Advisory Board Election Information (2012)

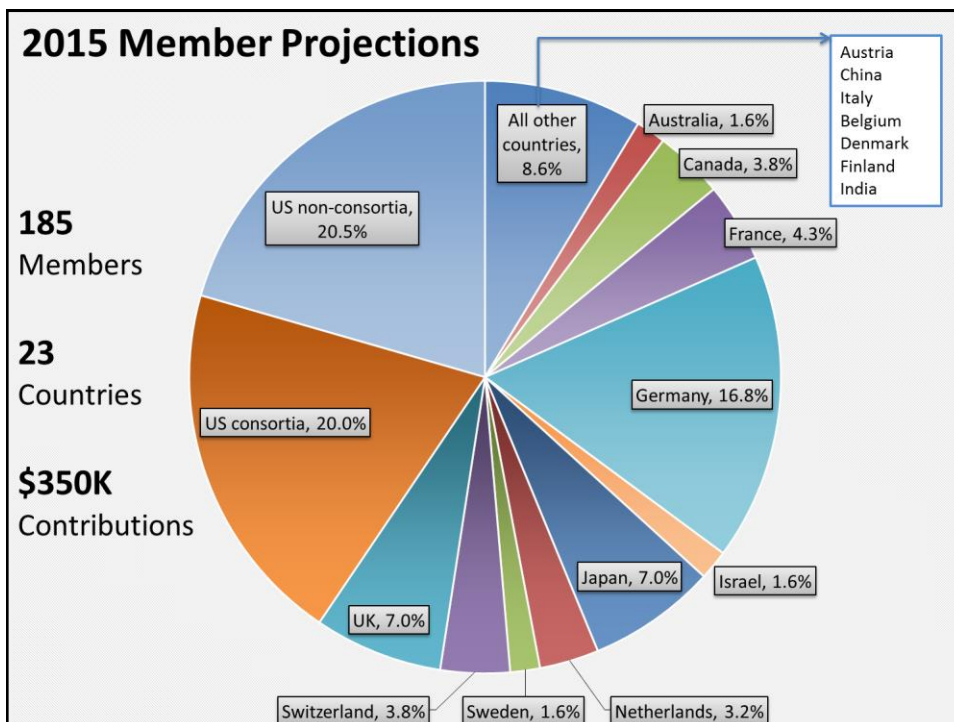
<https://confluence.cornell.edu/x/xKSTBw>

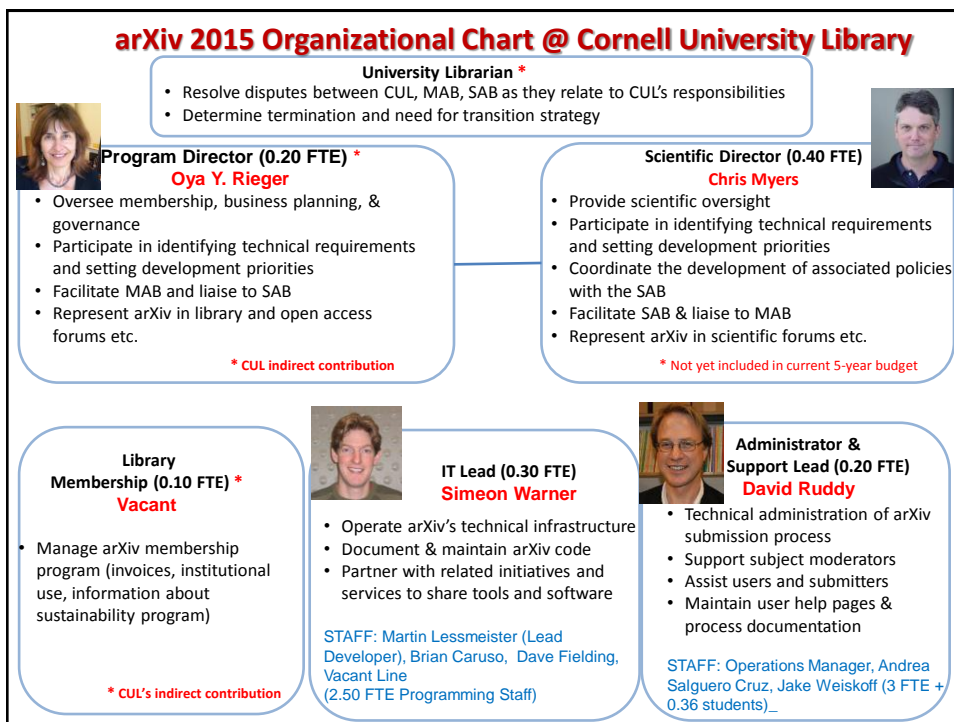
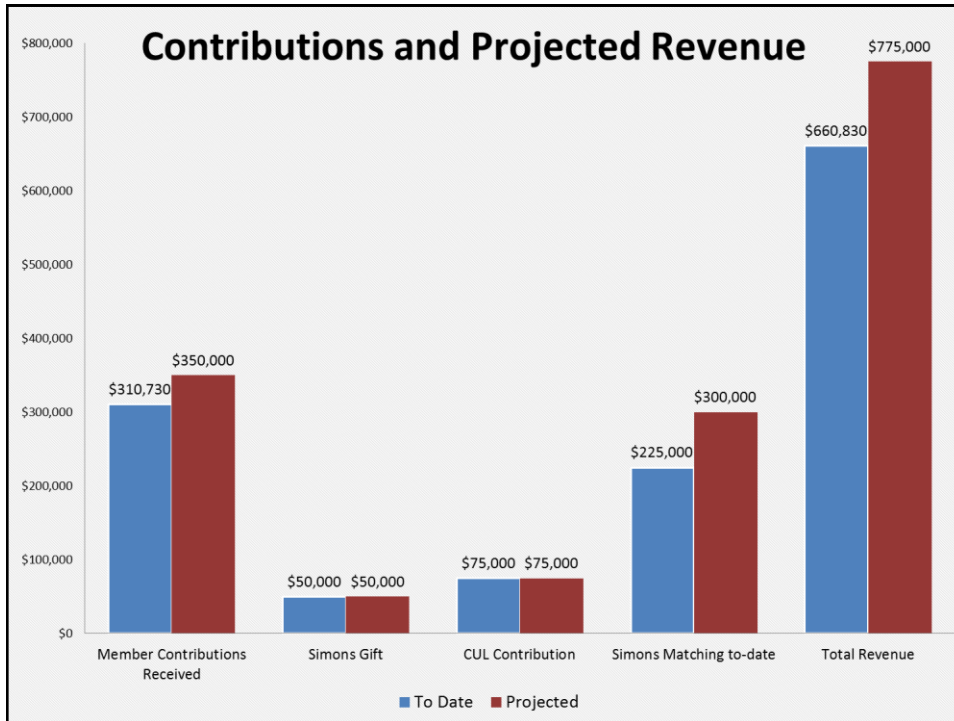


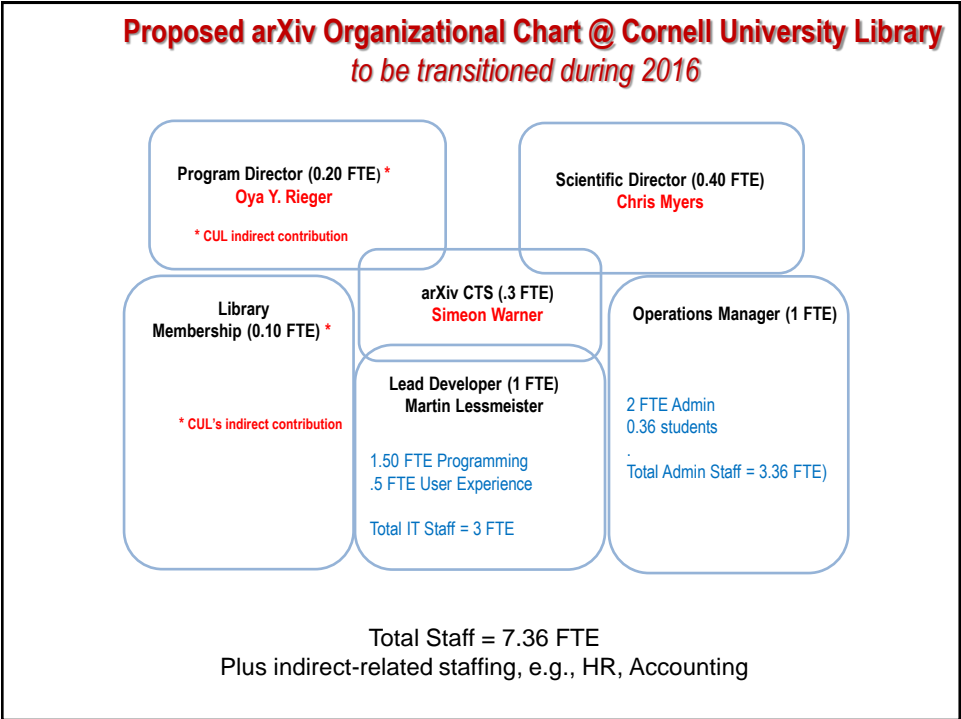
Business Model, 2013-2017

- Cornell University Library
 - \$75,000 per year in support of operational costs
 - in-kind contribution of all indirect costs (37%)
- Simons Foundation
 - \$50,000 per year (increases to \$100,000 per year in 2016)
 - \$300,000 per year matching grant
- Member Institution
 - annual fees within \$1,500-3,000 range (based on usage ranking)

5







arXiv CY2015 MIDYEAR BUDGET					Projected Budget	Midpoint (August)
REVENUE						
	Member contributions				\$340,000	\$350,000
	Simons Foundation Annual Commitment				\$50,000	\$50,000
	Simons Foundation Matching Fund				\$300,000	\$300,000
	Cornell University Library (Direct)				\$75,000	\$75,000
	TOTAL REVENUE				\$765,000	\$775,000
EXPENSES						
	Personnel (including benefits)					
		User support	2.5 FTE + 0.50FTE student			
		Programming and system maintenance	2.5 FTE			
		Scientific Director	.40 FTE			
		Management	0.52 FTE			
		Gen-ph moderator	Contract			
				<i>Subtotal Personnel¹</i>	\$653,000	\$552,522
	Non-Personnel					
		Servers (physical & virtual), hardware maintenance, storage and backup			\$36,000	\$44,000
		Network bandwidth and communication			\$8,706	\$600
		Staff computers, software, supplies and misc. expenses			\$3,000	\$3,000
		Advisory Board meetings (SAB and MAB) and staff conference travel			\$40,000	\$40,000
				<i>Subtotal Non-Personnel²</i>	\$87,706	\$87,600
	TOTAL DIRECT EXPENSES				\$740,706	\$640,122
	Indirect and Volunteer Costs					
		College and department administration, staff support (26% of direct costs) ³			\$192,584	\$171,177
		Facilities (11% of direct costs) ⁴			\$81,478	\$72,421
		arXiv moderation (130+ moderators, varying time commitments)			<i>not tracked</i>	<i>not tracked</i>
				<i>Subtotal Indirect Costs</i>	\$274,061	\$243,598
	TOTAL EXPENSES (direct + indirect)				\$1,014,767	\$883,720
	PROJECTED NET CHANGES IN RESERVES (revenue less direct expenses)⁵				\$24,294	\$134,878
RESERVES						
	Operating Reserves					\$200,000
	Development Reserves					\$445,000

arXiv CY2016 PROPOSED BUDGET					Projected Budget	
REVENUE						
	Member contributions				\$350,000	
	Simons Foundation Annual Commitment				\$100,000	
	Simons Foundation Matching Fund				\$300,000	
	Cornell University Library (Direct)				\$75,000	
	TOTAL REVENUE				\$825,000	
EXPENSES						
	Personnel (including benefits)					Salary/Benefits
		User Support & Management	3 FTE + 0.50FTE student			
		Programming and UX	3 FTE			
		Scientific Director	.40 FTE			
		IT Strategy/Management	.30 FTE			
		Gen-ph Moderator	Contract			
				<i>Subtotal Personnel</i>	\$664,000	
				<i>Funded by Development Reserve</i>	\$200,000	
				<i>Main Budget Commitment</i>	\$464,000	
	Non-Personnel					
		Servers (physical & virtual), hardware maintenance, storage and backup			\$44,000	
		Network bandwidth and communication			\$1,000	
		Staff computers, software, supplies and misc. expenses			\$3,000	
		Advisory Board meetings (SAB and MAB) and staff conference travel			\$40,000	
				<i>Subtotal Non-Personnel</i>	\$88,000	
	TOTAL DIRECT EXPENSES			<i>not including 37% indirect</i>		\$752,000
RESERVES						
	Operating Reserves					\$250,000
	Development Reserves					\$530,000
Does not include 37% indirect costs.						

Budget in a Nutshell

Description	2010	2011	2012	2013	2014	2015	2016
Projected Costs	\$312,000	\$435,000	\$509,000	\$503,000	\$505,000	\$456,000	\$552,000
Additional Costs	-	-	-	-	\$138,028	\$184,000	\$200,000
Total Direct Costs	\$312,000	\$435,000	\$509,000	\$503,000	\$643,000	\$640,000	\$752,000
Revenue	\$383,000	\$470,000	\$511,000	\$770,000	\$775,000	\$775,000	\$825,000
Operating Reserves				\$100,000	\$150,000	\$200,000	\$250,000
Development Reserves				\$277,000	\$360,000	\$445,000	\$468,000

Additional costs for 0.4 FTE Scientific Director, 1 FTE Programmer, and Gen-Phy Mod
The data provided for 2015 & 2106 are estimates as of September 2015.

13

Reserves 2010-2015

1. Operating Reserves

- support the service's transition to another institution
- provide a safety net when there is a revenue short-fall
- 2010-2015 balance estimate = \$200,000*

2. Development Reserves

- support special projects
- Scientific Director + 1 FTE programmer + GenPh Mod
 - 2014 = \$184,500
- 2010-2015 balance estimate = \$445,000

* Long Term Investment Pool

14

Works Well

- arXiv continues to be heavily used and praised
- Membership-based fund raising works well for covering base operating costs
- Governance model
 - fosters transparency & accountability
- Myers as Scientific Director
- Initial work re: funding sources:
 - Development of special projects list & initial cost projections
 - Initial contact with NSF
 - Advice from Cornell development office
 - Give button pilot (finally...)

15

Needs Improvement

- Communication
 - IT development process and priorities
 - setting/managing expectations
- Authority – further clarification of Paul G.'s embedded role
- Supporting maintenance & simultaneous development
- IT infrastructure
 - scaling to new demands and modern tools
- Fractured nature of org model
- Plans beyond 2017 – CUL's role?

16

2016: Proposed Strategies for Consideration

- Assign a full-time lead programmer
 - Warner will continue his work at the same level (.3 FTE) as a strategist/manager.
- Ruddy's role will transition into full-time Operations Manager
- Add a user experience (UX) staff
 - translation of requirements & functionality into mock-ups and implementation plans
 - creation of consistent feedback loops (communication)
- Engage two external technologists/managers to advise us on IT staffing, workflows, communication, and strategies
 - Needs to be light and nimble process
 - expand arXiv staff (in consultation with MAB/SAB)
- Engage in grant writing (Sloan Foundation)
 - Involvement of a new librarian to help with this process
- arXiv user study for improving interface/search functionality
 - Identify and prioritize user segments

17

Service	Budget	FTE	Funding	Organization
ADS	\$2.15 million	10 FTE (includes 3.5 FTE IT staff)	NASA	Smithsonian Astrophysical Observatory
Inspire	not available	10 FTE (excludes IT team & project leads)	SLAC, FNAL, CERN, DESY, IHEP-Beijing	SLAC, Fermilab, CERN, DESY, IHEP-Beijing
Euclid	\$1 million	6.5 FTE (includes 1 FTE programmer)	Revenues	CUL & Duke University Press
arXiv	\$1 million	6.7 FTE (includes 1 FTE programmer)	CUL, Simons Foundation, Members	CUL
* Budgets include direct and indirect costs				

Give Pilot as Fund Raising Strategy

19

Give Pilot as Fund Raising Strategy

from 2014 MAB meeting minutes

- Give button interface will need to be thoughtfully designed so that it is not lost on arXiv's current text-heavy interface.
- Give button should only reside as an option on the search interface, and not on the submission or moderation pages
- How do we define success, and balance our benchmark to any impact that a give button may have on arXiv's reputation and goodwill?
- Revenue from the give-button is not a reliable source of income, and therefore if the give button is present on arXiv it will be tied special project.
- The give button is also a promotional opportunity to remind users of the contributions already provided by their institutions. Using it in this way will also demonstrate that arXiv is not in financial trouble.
- We will acknowledge the contributors. Recommendations were for an alphabetical list or for something like "circles" of contributors who donated specific amounts, but no logos, links, or special branding.

20

Online Fund Raising Pilot: Initial Findings

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Subject search and browse:

10 Sept 2015: arXiv online fund raising pilot
12 Jan 2015: Reflections on the 1 million paper milestone
12 Jan 2015: A project update, including a brief summary of activities in 2014, has been posted
See cumulative "What's New" pages. Read robots beware before attempting any automated download

Physics

- Astrophysics (**astro-ph** new, recent, find)
includes: Astrophysics of Galaxies; Cosmology and Nongalactic Astrophysics; Earth and Planetary Astrophysics; High Energy Astrophysical Phenomena; Instrumentation and Methods for Astrophysics; Solar and Stellar Astrophysics
- Condensed Matter (**cond-mat** new, recent, find)
includes: Disordered Systems and Neural Networks; Materials Science; Mesoscale and Nanoscale Physics; Other Condensed Matter; Quantum Gases; Soft Condensed Matter; Statistical Mechanics; Strongly Correlated Electrons; Superconductivity
- General Relativity and Quantum Cosmology (**gr-qc** new, recent, find)
- High Energy Physics - Experiment (**hep-ex** new, recent, find)
- High Energy Physics - Lattice (**hep-lat** new, recent, find)
- High Energy Physics - Phenomenology (**hep-ph** new, recent, find)
- High Energy Physics - Theory (**hep-th** new, recent, find)
- Mathematical Physics (**math-ph** new, recent, find)
- Nonlinear Sciences (**nlin** new, recent, find)
includes: Adaptation and Self-Organizing Systems; Cellular Automata and Lattice Gases; Chaotic Dynamics; Exactly Solvable and Integrable Systems; Pattern Formation and Solitons
- Nuclear Experiment (**nuclex** new, recent, find)
- Nuclear Theory (**nucl-th** new, recent, find)
- Physics (**physics** new, recent, find)
includes: Accelerator Physics; Atmospheric and Oceanic Physics; Atomic Physics; Atomic and Molecular Clusters; Biological Physics; Chemical Physics; Classical Physics; Computational Physics; Data Analysis, Statistics and Probability; Fluid Dynamics; General Physics; Geophysics; History and Philosophy of Physics; Instrumentation and Detectors; Medical Physics; Optics; Physics Education; Physics and Society; Plasma Physics; Popular Physics; Space Physics
- Quantum Physics (**quant-ph** new, recent, find)

Mathematics

- Mathematics (**math** new, recent, find)
includes (see [detailed description](#)): Algebraic Geometry; Algebraic Topology; Analysis of PDEs; Category Theory; Classical Analysis and ODEs; Combinatorics; Commutative Algebra; Complex Variables; Differential

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If you've selected an "Other" option above, please specify here along with any special instructions:

You are about to make a one-time gift. Would you like to turn it into a recurring gift instead? (optional)

Yes, make this a recurring gift.

Find out if your company will match your gift.

22

359 individuals = total \$15,700K

\$1,000	1
\$500	3
\$300	1
\$250	1
\$200	4
\$150	1
\$100	47
\$55	1
\$50	61
\$40	3
\$30	11
\$25	30
\$20	71
\$18	1
\$15	9
\$11	1
\$10	84
\$7	1
\$5	22

Day		#	
Th	10	47	½ day
Fr	11	91	
St	12	33	
Sun	13	34	
Mon	14	55	
Tue	15	48	
Wed	16	51	

Thursday ½ day to be added

Roberto A. Lineros @Roberto_Lineros · Sep 13
 "#arxiv needs you!" I didn't know that arxiv needs funds. #arxivdonate.
 Will Arxiv become a wikipedia-like?

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High Energy Physics - Phenomenology
 Authors and titles for recent submissions
 • Fri, 11 Sep 2015
 • Thu, 10 Sep 2015
 • Wed, 9 Sep 2015
 • Tue, 8 Sep 2015
 • Mon, 7 Sep 2015
 [total of 133 entries: 1-28 | 29-50 | 51-75 | 76-100 | ... | 126-133]
 [showing 25 entries per page: none | none | all]
 Fri, 11 Sep 2015 (showing first 25 of 31 entries)
 [11 arXiv:1509.03987 (auth: robert)]

Ashton Verdery @AVerdery · Sep 12
 Just found out you can donate to support arxiv.org, which I've wanted to do for years. securefb.imodules.com/s/1717/alumni/...

N.Nakasato @dadeba · Sep 12
 "Donate to arXiv"というのが出た

Patrick Koppenburg @PKoppenburg · Sep 11
 Donate to #arxiv??? I donate to #wikipedia, but for arxiv I'd rather expect my lab or home institute to contribute.

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