# **IMS sponsored meeting**

# IMS Annual Meeting 2013/ Joint Statistical meeting

August 3, 2013 - August 8, 2013 Montrèal, Quebec, Canada

# 2013 ENAR/IMS meeting

March 10, 2013 – March 13, 2013 Orlando World Center Marriott Resort, Orlando, FL, USA

# 2013 WNAR/IMS meeting

June 16, 2013 – June 19, 2013 Los Angeles, California

# IMS China international conference 2013

June 30, 2013 - July 4, 2013 Chengdu, P. R. China

# **IMS co-sponsored meeting**

# ISBA regional meeting & international worksho / conference on Bayesian theory and applications

January 6, 2013 – January 10, 2013 Varanasi, India

# Seminar on stochastic processes

March 14, 2013 - March 16, 2013 Durham, North Carolina, USA

# Probability and statistics day at UCSD

April 5, 2013 – April 5, 2013 La Jolla, California, USA

# Graybill 2013 conference on survey statistics

June 10, 2013 – June 12, 2013 Fort Collins, Colorado, USA

# 9th conference on Bayesian nonparametrics

June 10, 2013 – June 14, 2013 Amsterdam, The Netherlands

# 2013 IMS workshop on finance probability and statistics

June 19, 2013 – June 21, 2013 National University of Singapore (NUS), Singapore

# The 20th annual ASA/IMS research conference (SRC) on statistics in industry and technology

June 20, 2013 – June 22, 2013 Los Angeles, CA, USA

# Australian New-Zealand applied probability workshop

July 8, 2013 – July 11, 2013 Brisbane, Queensland, Australia

# Advances in statistical methods for the analysis of observational and experimental data : A symposium in honor of Anastasios (Butch) Tsiatis

July 12, 2013 – July 12, 2013 Raleigh, North Carolina, USA

# 9th Cornell probability summer school

July 15, 2013 – July 26, 2013 Ithaca, New York, USA

# **INFORMS** applied probability society conference

July 15, 2013 – July 17, 2013 San Jose, Costa Rica

# Fourth international workshop in sequential methodologies (IWSM)

July 17, 2013 – July 21, 2013 Athens, Georgia, USA

# 36th conference on stochastic processes and their applications

July 29, 2013 - August 2, 2013 Boulder, Colorado, USA

# 15th IMS new researchers conference jointly sponsored by the IMS and the SSC.

August 1, 2013 - August 3, 2013 Montréal, Quebec, Canada

# « International conference ARS conjectandi 1713 – 2013 » to celebrate the 300th anniversary of the publication of Jacob I. Bernoulli's famous book

# « ARS conjectandi ».

October 15, 2013 - October 16, 2013 Basel, Basel-Stadt, Switzerland

# 2013 ICSA international conference

December 20, 2013 – December 23, 2013 Hong Kong, China

# Appointments of chairs for the IMS sponsored meetings

JSM 2014 (August 2-7, 2014, Boston, Massachusetts, USA)

- 1 Program Chair : Nancy Reid
- 1 contributed program chair : Bertrand Clarke

ENAR 2014 Spring Meetings, March 16-19, 2014, Baltimore, M

• 1 Program Chair : Daniel O. Scharfstein

# **Repartition of the 2015 medallion lectures**

JSM 2015 (also IMS Annual Meeting): Jin, Kosorok, Lafferty, Meinshausen, Miermont, Lin (JSM instead of ENAR)

APS 2015: Ramanan

SPA 2015: Sheffield

# I Treasurer's Report: Fiscal Year 2012

## Introduction

This report details membership and subscription data for calendar year end 2012. In addition, it reviews the fiscal year 2012 (FY2012: July 1, 2011–June 30, 2012) financial statements.

In 2012, the total number of IMS members experienced an increase in paid members and a decrease in total members. Subscriptions by institutions experienced an increase this past year. The financial status of the Institute continues to be stable, and actions have been taken to ensure its longterm stability. Details of the events of the past year, membership and subscription data, sales data, and a detailed analysis of the financial statement for FY2012 are given below.

# **Publications**

The following is a list of all current IMS core, co-sponsored, affiliated and supported journals:

IMS Core Print/Electronic Publications Annals of Applied Probability; Annals of Probability; Annals of Statistics; Annals of Applied Statistics; Statistical Science; Current Index to Statistics; IMS Collections; IMS Monographs; IMS Textbooks; IMS Bulletin Co-Sponsored Print/Electronic Publications Electronic Communications in Probability; Electronic Journal of Probability; Electronic Journal of Statistics; Journal of Computational and Graphical Statistics; NSF-CBMS Series in Probability and Statistics; Probability Surveys; Statistics Surveys

## **Supported Publications**

Annales de l'Institut Henri Poincaré; Bayesian Analysis; Bernoulli; Bernoulli News; Brazilian Journal of Probability and Statistics; Stochastic Systems

## **Affiliated Publications**

ALEA: Latin American Journal of Probability and Mathematical Statistics; Probability and Mathematical Statistics

## Membership Data

Total individual paid membership in the Institute as of December 31, 2012 increased 11.00% from December 31, 2011. Table 1 (below) presents the membership data back to 2005.

TABLE 1: Membership, by Calendar Year

	2005	2006	2007	2008	2009	2010	2011	2012	% <mark>change</mark>
Regular	2247	2256	2266	2179	2045	1970	1863	2142	15.0%
Life/Retired Life	205	264	327	402	455	475	475	486	2.3%
Reduced Country/Retired	435	428	430	453	433	399	401	417	4.0%
New Graduate	187	144	129	122	158	149	113	117	3.5%
IMS China	n/a	n/a	n/a	180	173	2	20	26	30.0%
Student	1224	1295	1160	1328	1368	1160	1116	781	-30.0%
Total	4298	4387	4312	4664	4632	4155	3988	3969	-0.5%
Total excluding free members (students, and in 2008–9 IMS China)	3074	3092	3152	3156	3091	2995	2872	3188	11.0%
Organizational*	100	111	45 <sup>*</sup>	20	11	12	5	5	0%

\* Organizational Membership was reconstructed in 2007 and libraries were no longer included. This change reclassified these previous "members" to institutional subscriptions

Geographic Distribution of Members: The IMS membership is currently distributed as follows: 62% United States; 18% Europe; 11% Asia; 4% Canada; 2% South America, Mexico and the Caribbean; 2% Australia and New Zealand; 1% Africa

Selection of Journals by Members: Print subscriptions by members continued to decrease in 2012, as expected, because members are opting to reduce their use of print while enjoying free electronic access to all journals. Electronic access by individual members has increased this year. Members are charged actual cost for print copies of journals, so there is no net loss or gain to the bottom line from changes in print subscriptions by members. Table 2 (opposite) shows the current selection of journals by members.

Revenue from all member dues and member journal subscriptions increased 1.5%, to \$330,229 for the fiscal year ending June 30, 2012, up from \$325,341 in FY2011. This is attributed to the increase in paying members and decreased member print subscriptions.

The IMS offers joint membership opportunities with the following societies: Bernoulli Society (BS); International Statistical Institute/Bernoulli Society (ISI/BS); International Society for Bayesian Analysis (ISBA); Applied Probability Society/INFORMS (APS/ INFORMS); Sociedad Latino Americana de Probabilidad y Estadística Matematica (SLAPEM). In 2012, we processed 623 memberships to other societies (up from 604 in 2011).

IMS China: In 2008 IMS introduced IMS China. IMS China promotes the participation of Chinese scholars in activities of the Institute of Mathematical Statistics. It allows the IMS an opportunity to introduce our organization to a constituency that may not have had easy access to our offerings in the past. The program has been moderately successful to date, and in 2012 there was an increase in IMS China membership to 26 members (from 20 in 2011).

# **Institutional Subscription Data**

Table 3 (opposite) presents comparative subscription data for institutions to each of our scientific journals for 2012 and previous years. There were subscription increases to all journals in 2012. Overall institutional subscriptions increased by 3.6%. Revenue from all non-member subscriptions was \$1,558,045 for FY2012, up from \$1,514,857 for the FY2011. The increase is due to increased subscription fees and increased subscriptions. We are seeing large increases in

our bundled offerings, which are discounted on the whole. Approximately 60% of the non-member subscribers to IMS journals are in USA and Canada, with the remaining subscribers distributed throughout the world.

## **Book Sales Data**

Table 4 presents sales data for all IMS book series. In 2010 the IMS published its first volumes in a cooperative arrangement with Cambridge University Press to publish two series, IMS Monographs and IMS Textbooks. Sales of these volumes are going very well. The CBMS-NSF Regional Conference Series has not published a volume since 2004, but one is to be published in 2013. The IMS Collections series has seen very low sales, and the series has been formulated in order for the IMS to have minimal loss on these volumes. The IMS Lecture Notes-Monograph Series ceased publication in 2010. Overall, total revenue for all books decreased to \$12,200 in FY2012 from \$16,500 in FY2011.

PRINT (paid)	2005	2006	2007	2008	2009	2010	2011	2012	% change
AAP	670	619	497	428	382	280	197	126	-36.0%
AOP	677	616	534	481	416	298	218	184	-15.6%
AOAS	n/a	n/a	n/a	1,160	1,089	714	480	379	-21.0%
AOS	1,853	1,723	1,608	1,323	1,109	763	555	447	-19.5%
STS	2,565	2,412	2,146	1,880	1,680	1,310	1,035	869	-16.0%
Total	5,765	5,370	4,785	5,272	4,676	3,365	2,485	2,005	-19.3%
ELECTRONIC	(free access)	: members	s setting up	o individua	l electronio	access to	MS journa	ls	

LECTION (nee access). members setting up marviadar electronic access to ims journ

 Total
 1,262
 1,409
 1,660
 1,681
 1,711
 1,761
 2,026
 2,010
 -0.8%

 \*\* Previously this information was reported as all members (including organizational), however data has been reformatted to show individual members only, to reflect the change in classification and to better view the current status of the data.

TABLE 3: Institutiona	l Paid Su	bscriptions, b	y Calendar Yea	r
-----------------------	-----------	----------------	----------------	---

PRINT	2005	2006	2007	2008	2009	2010	2011	2012	% change
AAP	659	659	700	636	680	684	645	687	6.5%
AOP	974	911	977	900	948	967	901	908	0.8%
AOAS	n/a	n/a	n/a	174	247	320	331	380	14.8%
AOS	1,233	1,171	1,227	1,118	1,154	1,158	1,127	1,132	0.5%
STS	949	922	976	865	890	899	861	865	0.5%
Bulletin	207	201	275	174	176	166	142	128	-9.9%
CIS	n/a	n/a	n/a	295	297	267	273	249	8.9%
AIHP <sup>s</sup>	n/a	n/a	[174]	228	271	286	289	326	16.4%
Bernoulli <sup>s</sup>	n/a	[199]	199	198	264	278	280	321	11.1%
BJPS <sup>s</sup>	n/a	n/a	n/a	n/a	64	78	88	117	33.0%
Total	4,022	3,864	4,528	4,577	5,009	5,129	4,937	5,113	3.6%

<sup>s</sup> denotes IMS-supported journals. Numbers in [brackets] are prior to journal becoming IMS-supported.

TABLE 4: Total sales from the NSF-CBMS Regional Conference Series, the Lecture Notes-Monograph Series, and IMS Collections, Monographs and Textbooks [Fiscal Year Data (July 1-June 30)]

	to 2005	2006	2007	2008	2009	2010	2011	2012	TOTAL
Total NSF-CBMS sales (8 volumes)	5,467	258	129	108	57	108	57	13	6,197
Total LNMS sales (58 volumes)	25,875	1,084	628	454	235	297	124	40	28,737
Total IMS Collections sales (9 volumes)	n/a	n/a	n/a	n/a	9	3	5	3	20
IMS Monographs sales (2 volumes)	n/a	n/a	n/a	n/a	n/a	660	586	789	2,035
IMS Textbooks sales (1 volume)	n/a	n/a	n/a	n/a	n/a	639	491	326	1,456

# **Financial Overview**

The following is a detailed analysis of the Financial Statement for FY2012, which is presented on pages 20–23, following this Treasurer's Report. Comparisons are always made with FY2011. The overall financial status of the Institute continues to be stable.

Per the auditor's report, in FY2012 we experienced an increase in net assets of \$496,711. The IMS Council approved a FY2012 operational budget that included net operational gains of \$247,315. Due to tight fiscal controls and better than expected revenues, the actual net revenue is \$455,398 from operations in FY2012. In FY2011 the gain on operations was \$233,822. Please see Figures 1 and 2 (overleaf) for the history of our net assets and net operating revenue.

The Council and Executive Committee made it a high priority to have an operational balanced budget in FY2010 and beyond and to increase net assets back to the levels appropriate for our revenue and expense stream. Net revenues are currently being invested annually into long term reserves. The IMS currently has 1.5 years of expenses in long term reserve. Based on the current publishing climate, the IMS aims to have strong long term reserves.

## Revenue

- Membership dues and subscription revenues were adjusted to
  prorate calendar-year revenues to fit with the Institute's fiscal year
  reporting, as was done in the past. Revenues from membership
  are up in FY2012 as compared to FY2011 due to increased dues.
  Print subscription income from members is down as more members opt to use the online access included with membership. Print
  journal prices for members are set at our variable cost to print.
- Revenues from institutional subscribers are up due to increases in subscription fees and total subscriptions.
- Sales of printed back issues are down in FY2012 from FY2011. In

# Treasurer's Report continued

general, all publishers are experiencing a shift from print to online orders.

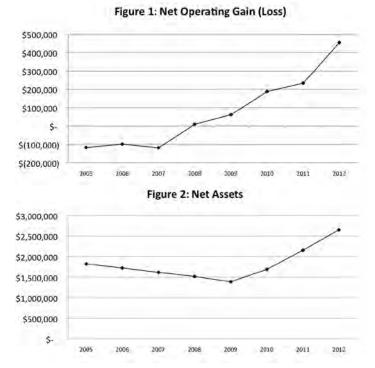
- Page charges are up in FY2012. Due to its voluntary nature, page charge contributions tend to fluctuate greatly from year to year.
- Revenue from sales of books is down. The IMS is selling fewer books in its self-published series. The series co-published with Cambridge University Press is going very well, however the income the IMS receives from these volumes is relatively lower.
- Meeting income is down in FY2012. The income shown is a result of our contractual arranged income from the Joint Statistical Meetings. There was no income from another meeting last year.
- The financial report also shows a new line item called "Managed Meetings": this includes those meetings for which the IMS processes the revenue and pays the expenses for the meeting as a service to the community. This item is down significantly as fewer meetings were managed. IMS covers its expenses for managing these meetings; in turn the expense for this line item is down.
- Advertising revenues are up due to more ads placed.
- Offprints, royalty and other showed an increase, as royalties from IMS's interest in JSTOR increased.
- Net profits of joint publication ventures is \$0 because IMS ceased its joint venture on December 31, 2011.
- Contributions are up as campaigns for the Blackwell and Schramm lecture took place in FY2012.
- The realized and unrealized gains on investments shows the decreased value we experienced on our mutual funds due to a slight dip in the markets for June 30, 2011 as compared to June 30, 2012.
- Interest and Dividends are up in FY2012.
- Net assets released from restrictions are those funds paid out from restricted funds.

## **Expenses**

The IMS makes a distinction between Program and General Administrative expenses in its audited reports. This is appropriate reporting for a non-profit organization and gives members a better idea of how much is being spent on actual programming (journals, meetings, etc) versus what is spent purely on administration of the Institute. We are happy to report that 92.3% (vs. 92.9% last year) of your dues dollars goes directly into the program functions of the IMS. More on expenses can be found in the Discussion of Note 8 and 9 sections below.

# Discussion of Note 8 in Financial Statements for FY2012

Here you will see the allocation for expenses for Program and General Administrative Expenses. Production and Editorial expenses will be



discussed below in the "Discussion of Note 9."

- Mailing and shipping at the press is down in FY2012 due to decreases in total issues mailed as members and institutions opt to use electronic access for journals.
- Salaries are up in FY2012 reflecting wage increases.
- The management fee shows the expenses paid to FASEB for the dues, subscriptions and web services they provide for IMS. This is down in FY2012 as slightly fewer services were needed in FY2012.
- Scientific meeting expenses were down slightly in FY2012 due to the meeting venue and slightly lower expenses.
- Managed meetings are down as fewer meetings were managed.
- The supported journal royalty is the contractual amount paid to supported journals for our agreement to assist them with publishing. The royalty is a percentage of net income for each publication. This is down in FY2012 as one publication (CIS) no longer has payments to be made.
- Postage and shipping from the office includes mailing of all dues and subscription paper renewal forms and catalogs. It also includes shipment of all IMS book orders. It is down in FY2012 as more members renew online, thereby saving us mailing expenses. In addition, book sales are down so less shipping was required.
- Insurance fees are stable. This includes liability insurance for all

officers and editors, publications and business equipment.

- Credit card fees include all processing fees for credit cards. This is decreased as bundling payments with FASEB allowed us a fee break.
- Professional fees includes fees paid to accountants and lawyers. These are down in FY2012 as we changed to new accountants.
- Business meeting expenses are stable.
- Membership drives and publicity includes advertising of journals and IMS membership.
- Information technology services represent the hiring of contractors to provide needed services. This is stable in FY2012.
- Storage fees are stable as we are now storing only two years of back issues.
- Contributions to other organizations includes all dues and subscriptions to several organizations by the IMS and the Executive Director. These include Conference Board of Mathematical Statistics, Association for Women in Math, the Council for Engineering and Scientific Society Executive, the Society for Scholarly Publishing, and the American Mathematical Society annual salary survey. These are down as one more expensive membership was dropped and the involvement by the IMS in the AMS annual survey was scaled back.
- Rent and utilities is for the Executive Director's office.
- Administrative Services includes assistance with data entry for the Executive Director.
- Printing includes all non-journal printing, including annual invoices and catalogs. This is down as fewer copies are printed.
- Computer equipment and software includes equipment for the Executive Director, the Production Manager and the *Bulletin* Assistant Editor.
- Supplies include all needed office supplies for Executive Director's office.
- Office and other expenses includes bank fees and other miscellaneous expenses.
- Telephone is for both the Executive Director's phone and an allocation of calls to FASEB on IMS dues and subscription inquiries.
- Presidential funds are allocated to each president to use as needed during his/her tenure.
- Bad Debt expense are those invoices written off for non-payment. Discussion of Note 9 in Financial Statement for FY2011

## **Production Expenses:**

- Production expenses for *Annals of Applied Statistics* is down as less color was printed in FY2012.
- Production expenses for *Annals of Applied Probability* and *Annals of Statistics* are down as fewer pages were published in FY2012.

- Production expenses for *Annals of Probability* and *Statistical Science* are up as the total page count for all these journals was up in FY2012.
- The *IMS Bulletin* expenses are down due to a decrease from 10 issues to 8 per year and an option for members to receive the publication electronically rather than in print.
- *IMS Collections* printed one issue in FY2011.
- Some *LNMS* volumes can now be ordered in print copy from Euclid. To set this up, it costs a couple hundred dollars for a volume. Only those higher sales volumes are moved to this option when back print stock is no longer available.
- The Web Page production expenses were stable in FY2011.
- *AIHP*, *Bernoulli*, and *Bernoulli News* were stable in FY2012.
- *Brazilian Journal of Probability and Statistics* printed fewer pages in FY2012.
- Expenses for *Probability Surveys, Statistics Surveys* and *Electronic Journal of Statistics* are minimal and shared with the other cosponsoring societies.
- *Current Index to Statistics* had hosting expenses in FY2012. In addition, some development funds were allocated in FY2012.
- Electronic operations include expenses for placement and hosting of our journals on Project Euclid and ArXiv, and expenses associated with our Electronic Journal Management System. We experienced increased rates in FY2012 as more articles are available in the platforms and using the EJMS.

## **Editorial Expenses:**

- Editorial expenses for all journals are minimal in FY2012 as all journals have moved into the central editorial office. All editors are within their budgets for the length of their term.
- *Current Index to Statistics* expenses are stable.
- The *IMS Bulletin* assistant editor expenses increased due to changes in the exchange rate as she is located in the UK.
- The Web editor expenses are down. In FY2009 work on a new content management system for the web page was approved. The final phase of this project was completed in FY2011.
- Managing and production editorial expenses are up slightly.
- The Central Editorial Office handles all secretarial support for the IMS core, supported and electronic based journals.

## Discussion of Note 10 in Financial Statement for FY2012

Note 10 shows distribution of funds in restricted accounts.

- Dorweiller, Hotelling, New Researchers and Development Funds experienced no changes.
- The Laha Fund decreased as grants were awarded in FY2012.
- The Tweedie Fund decreased as an award was made in FY2012.
- The Open Access Fund increased due to donations.

# **Treasurer's Report**

## Continued from page 19

- The Le Cam Fund increased due to return on investment for the endowment.
- The Blackwell and Schramm Funds are both new to IMS in FY2012.

# Recommendation

The Executive Committee recommended an institutional subscription fee increase of approximately 5% for 2013. Dues rates for members are increased by US\$4 to US\$112. Subscription rates to



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members are adjusted to the variable cost. Members are given a 10% discount off dues if they renew by December 31.

The 2012 IMS Council approved these recommendations in June and August 2012. Jean Opsomer, Treasurer

## **Institute of Mathematical Statistics**

### **Statement of Financial Position**

June 30, 2012 (with comparative totals for 2011)

#### Assets

	2012	2011							
Cash and cash equivalents Investments, at fair market value Certificates of deposit Accounts receivable Interest receivable Prepaid expenses Assets restricted for endowment	\$ 566,350 2,161,332 1,212,566 18,310 1,917 44,216 80,481	\$ 392,986 1,892,790 1,124,478 3,625 1,088 28,000 37,746							
Total assets	\$ <u>4,085,172</u>	\$ <u>3,480,713</u>							
Liabilities and Net Assets									
Liabilities: Accounts payable and accrued liabilities Unearned memberships, subscriptions, and meeting revenues Total liabilities	\$ 179,597 <u>1,252,460</u> 1,432,057	\$ 132,080 <u>1,192,229</u> 1,324,309							
Net assets: Unrestricted: Undesignated Council-designated Total unrestricted	2,466,496 72,219 2,538,715	2,020,541 <u>79,494</u> 2,100,035							
Temporarily restricted Permanently restricted Total net assets	39,320 75,080 2,653,115	23,949 32,420 2,156,404							
Total liabilities and net assets	\$ <u>4,085,172</u>	\$ <u>3,480,713</u>							

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Independent Auditor's Report

The Council Institute of Mathematical Statistics

We have audited the accompanying statement of financial position of the Institute of Mathematical Statistics (the "Institute", a nonprofit organization) as of June 30, 2012, and the related statements of activities and cash flows for the year then ended. These financial statements are the responsibility of the Institute's management. Our responsibility is to express an opinion on these financial statements based on our audit. The prior year summarized comparative information has been derived from the Institute's 2011 financial statements and, in our report dated November 28, 2011, we expressed an unqualified opinion on those financial statements.

We conducted our audit in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audit provides a reasonable basis for our opinion

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of the Institute of Mathematical Statistics as of June 30, 2012, and the changes in its net assets and its cash flows for the year then ended in conformity with accounting principles generally accepted in the United States of America United States of America.

Ciuni + Panietri, Inc.

Cleveland, Ohio November 5, 2012

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## **Institute of Mathematical Statistics**

### Statement of Activities

## For the year ended June 30, 2012 (with comparative totals for 2011)

	Unrestricted	Temporarily Restricted	Permanently Restricted	Total 2012	Total 2011
Revenues, gains, and support:					
Membership dues and journal subscriptions	\$ 330,229	\$ -	\$ -	\$ 330,229	\$ 325,341
Non-member subscriptions	1,558,045	-	-	1,558,045	1,514,857
Sales of back issues	5,841	-	-	5,841	12,559
Page charges	48,537	-	-	48,537	41,763
Sales of books	3,719	-	-	3,719	12,360
Scientific meetings	12,200	-	-	12,200	16,500
Managed meetings	16,670	-	-	16,670	151,019
Advertising	38,786	-	-	38,786	35,500
Offprints, royalties, and other	93,234	-	-	93,234	90,422
Net profit of joint venture publications	-	-	-	-	5,659
Contributions	300	16,835	42,660	59,795	1,694
Realized and unrealized (losses) gains	(18,482)	-	-	(18,482)	229,320
Interest and dividends	56,616	224	-	56,840	37,974
Net assets released from restrictions	1,688	(1,688)	<u> </u>		
Total revenues, gains, and support	2,147,383	15,371	42,660	2,205,414	2,474,968
Expenses:					
Program	1,577,513	-	-	1,577,513	1,867,088
General and administrative	131,190			131,190	143,044
Total expenses	1,708,703			1,708,703	2,010,132
Changes in net assets	438,680	15,371	42,660	496,711	464,836
Net assets, beginning of year	2,100,035	23,949	32,420	2,156,404	1,691,568
Net assets, end of year	\$ <u>2,538,715</u>	\$ 39,320	\$	\$ <u>2,653,115</u>	\$ <u>2,156,404</u>

#### Statement of Cash Flows

### For the year ended June 30, 2012 (with comparative totals for 2011)

	-	2012	_	2011
Cash flows from operating activities:				
Changes in net assets	\$	496,711	\$	464,836
Adjustments to reconcile changes in net assets				
to net cash provided by operating activities:				
Write-off of uncollectible accounts receivable		271		8,856
Net profit of joint venture publications		-		(5,659)
Realized and unrealized losses (gains)		18,482		(229,320)
Contributions restricted for long-term purposes		(42,660)		-
Changes in operating assets and liabilities:				
Accounts receivable		(14,956)		(3,525)
Interest receivable		(829)		673
Prepaid expenses		(16,216)		9,696
Deposits		-		11,000
Accounts payable and accrued liabilities		47,517		211
Unearned memberships, subscriptions,				
and meeting revenues	_	60,231	_	32,307
Net cash provided by operating activities		548,551		289,075
Cash flows from investing activities:				
Purchases of investments and certificates of deposit,				
net of proceeds from sales		(417,682)		(468,076)
Restricted cash for endowment		(165)		(132)
Proceeds from dissolution of joint venture	_		_	55,621
Net cash used by investing activities		(417,847)		(412,587)
Cash flows from financing activities:				
Proceeds from contributions restricted for long-term purposes		42,660		-
Net cash provided by financing activities	_	42,660	_	-
Increase (decrease) in cash and cash equivalents		173,364		(123,512)
increase (decrease) in easi and easi equivalents		175,504		(125,512)
Cash and cash equivalents, beginning of year	-	392,986	-	516,498
Cash and cash equivalents, end of year	\$ _	566,350	\$_	392,986

# The accompanying notes are an integral part of these financial statements Notes to the Financial Statements

#### Notes to the Financial Stateme

## 6

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#### June 30, 2012

## Note 2: Summary of Significant Accounting Policies (continued)

#### Basis of Presentation (continued)

Permanently Restricted Net Assets – Net assets subject to donor-imposed stipulations that they be maintained by the Institute in perpetuity. Generally, the donors of these assets permit the Institute to use all or part of the income earned on any related investments for general or specific purposes.

#### Functional Allocation of Expenses

The costs of providing the program and supporting activities of the Institute have been summarized on a functional basis in the statement of activities. Accordingly, certain costs have been allocated to the appropriate programs and supporting activities.

#### Use of Estimates

The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

#### Cash and Cash Equivalents

The Institute considers all unrestricted cash and highly liquid investments with initial maturities of three months or less to be cash equivalents.

#### Investments

Investments in marketable securities with readily determinable fair values and all investments in debt securities are reported at their fair values in the accompanying statement of financial position. Interest and dividend income, and realized and unrealized gains and losses are included in the change in unrestricted net assets in the accompanying statement of activities, unless donor-imposed restrictions over specific investment earnings exist, in which case, the investment earnings are classified as either changes in temporarily or permanently restricted net assets in accordance with such donor-imposed restrictions. Temporarily restricted investment is reported as unrestricted if such restrictions are met in the same fiscal year as the investment income is generated.

#### Receivables and Credit Policies

Accounts receivable includes uncollateralized obligations due primarily from the Institute's customers. Payments of receivables are allocated to the specific invoices identified on the remittance advice or, if unspecified, are applied to the earliest unpaid invoices.

The carrying amount of accounts receivable is reduced by a valuation allowance that reflects management's best estimate of the amounts that will not be collected. Management individually reviews all receivable balances that exceed 90 days from invoice date and estimates the portion, if any, of the balance that will not be collected. Additionally, management estimates an allowance for the aggregate remaining receivables based on historical collectability. At June 30, 2012, the allowance for doubtful accounts was \$-0-.

### Notes to the Financial Statements

## June 30, 2012

### Note 1: Description of Organization

5

The Institute of Mathematical Statistics (the "Institute") is an international professional and scholarly society devoted to the development and dissemination of the theory and applications of statistics and probability. Its activities include sponsorship of journals and other scientific publications, organization of scientific meetings, and cooperation with other scientific organizations.

The scientific journals are The Annals of Applied Probability, The Annals of Applied Statistics, The Annals of Probability, The Annals of Statistics, and Statistical Science. The IMS Bulletin is the news organ of the Institute. In addition, the Institute publishes The IMS Lecture Notes – Monograph Series and IMS Collections. Jointly with other organizations, the Institute publishes the Electronic Journal of Probability, Electronic Journal of Statistics, Surveys, Current Index to Statistics, and NSF-CBMS Regional Conference Series in Probability and Statistics. On behalf of other organizations, the Institute produces Annales de l'Institut Henri Poincaré (B) Probabilities et Statisticues, Bernoulli, Bernoulli News, Brazilian Journal of Probability and Statistics, and Stochastic Systems.

The Institute is an international organization of approximately 4,000 statisticians, probabilists, epidemiologists, and econometricians from industry, academia, and government.

## Note 2: Summary of Significant Accounting Policies

## Basis of Presentation

The Institute follows authoritative guidance issued by the Financial Accounting Standards Board ("FASB") which established the FASB Accounting Standards Codification ("ASC") as the single source of authoritative accounting principles generally accepted in the United States of America.

The accompanying financial statements have been prepared on the accrual basis of accounting. Net assets and revenues, expenses, gains, and losses are classified based on the existence or absence of donor-imposed restrictions. Accordingly, net assets of the Institute and changes therein are classified and reported as follows:

Unrestricted Net Assets – Net assets that are not subject to donor-imposed stipulations. Unrestricted net assets are expendable resources used to support the Institute's core activities. These net assets may be designated for specific purposes by action of the governing body of the Institute (the "Council") to be used for future periods (Council-designated).

Temporarily Restricted Net Assets – Net assets subject to donor-imposed stipulations that may or will be met, either by actions of the Institute and/or the passage of time. When a restriction expires, temporarily restricted net assets are reclassified to unrestricted net assets and reported in the statement of activities as net assets released from restrictions. If donor-imposed restrictions are met in the same year as they are imposed, the net assets are reported as unrestricted.

# Notes to the Financial Statements

## June 30, 2012

#### Note 2: Summary of Significant Accounting Policies (continued)

7

#### Revenue and Support Recognition

Membership dues and subscription fees are recognized as revenue on a straight-line basis over the term of the applicable membership and subscription period. Membership and subscription periods run from January 1 to December 31. Any time a member or non-member subscribes, he/she is entitled to all issues of the journal(s) published during the subscription period. The unearned portion of the revenue is recorded as a liability under the unearned memberships, subscription, and meeting revenues in the statement of financial position.

Lifetime membership fees are recognized as revenue over an amortization period of 12 to 15 years. Membership and subscriptions periods for lifetime members run from the first day of the calendar year a member subscriptios through the member's death. The unearned portion of the revenue is recorded as a liability under the unearned memberships, subscription, and meeting revenues in the statement of financial position.

#### Contributions

Contributions received are recorded as unrestricted, temporarily restricted, or permanently restricted support depending on the existence and/or nature of any donor restrictions. Unconditional promises to give are recognized as revenues in the period the promise is received. Conditional promises to give are recognized when the conditions upon which they depend are substantially met. The promises are initially recorded at their estimated fair value.

### Concentrations of Credit Risk

Financial instruments which potentially subject the Institute to concentrations of credit risk consist of cash and cash equivalents and investments.

The Institute has significant investments in equity and debt securities and is, therefore, subject to concentrations of credit risk. Though the market value of investments is subject to fluctuations on a year to year basis, the Institute believes that the investment policy is prudent for its long-term welfare.

At various times during the year ended June 30, 2012, the Institute's cash in bank balances may have exceeded federally insured limits.

## Production Costs of Publications

The Institute's policy is to expense the production costs of its publications as incurred rather than capitalize these costs as inventory. The Institute follows this policy as there is no discernible market for the publications after the initial distribution.

#### Notes to the Financial Statements

### June 30, 2012

#### Summary of Significant Accounting Policies (continued) Note 2:

#### Shipping and Handling Costs

Shipping and handling costs are recorded as incurred. These expenses are included in the functional expenses in Note 8.

#### Income Taxes

The Institute is a Section 501(c)(3) organization exempt from income taxes on activities related to its exempt purpose under Section 501(a) of the Internal Revenue Code and Section 23701d of the California Revenue and Taxation Code. No provision for federal or state income taxes has been reported in its financial statements

Income taxes are accounted for under the provisions of the "Income Taxes" topic of the FASB ASC. Uncertain income tax positions are evaluated at least annually by management. The Institute classifies interest and penalties related to income tax matters as income tax expense in the accompanying financial statements. As of June 30, 2012 and 2011, the Institute has identified no uncertain income tax positions and has incurred no amounts for income tax penalties and interest for the years then ended.

The Organization files its Federal Form 990 in the U.S. federal jurisdiction and a state registration at the office of the state's attorney general for the states of Ohio and California. The Institute is generally no longer subject to examination by the Internal Revenue Service for fiscal years before 2009.

#### Advertising

Advertising costs are expenses as incurred. Advertising expense amounted to \$8,190 and \$10,585 for the years ended June 30, 2012 and 2011, respectively.

#### Subsequent Events

In preparing these financial statements, the Institute has evaluated events and transactions for potential recognition or disclosure through November 5, 2012, the date the financial statements were available to be issued.

#### Note 3: Investments

8

The Institute is committed to a policy of low-cost long-term indexed investing with minimal intervention. The Institute's investment funds (that is, the funds other than the operating funds or the operating reserve) are to be invested as follows:

- 70% in domestic and international equities
- 30% in fixed-income instruments

# Notes to the Financial Statements June 30, 2012

#### 10

#### Unearned Memberships, Subscriptions, and Meeting Revenues Note 5:

Unearned memberships, subscriptions, and meeting revenues consist of the following for the years ended June 30

	-	2012	-	2011
Member dues and subscription fees	\$	195,288	\$	144,636
Non-member subscription fees		785,077		771,963
Lifetime and lifetime retired membership				
dues and subscription fees		260,475		275,630
Meeting fees		11,620	_	-
Total unearned memberships, subscriptions, and				
meeting revenues	\$	1,252,460	\$ _	1,192,229
meeting revenues	\$_	1,252,460	\$ _	1,192,229

#### Net Asset Classification of Endowment Funds Note 6:

The Institute's endowment consists of two donor-restricted endowment funds, the Le Cam Endowment and the Blackwell Lecture Endowment (see Note 10), established in order to fund professional lectures. As required by GAAP, net assets associated with endowment funds are classified and reported based on the existence or absence of donor-imposed restrictions.

The Institute has interpreted the State Prudent Management of Institutional Fund Act ("SPMIFA") as requiring the preservation of the fair value of the original gift as of the gift date of the donor-restricted endowment funds absent explicit donor stipulations to the contrary. As a result of this interpretation, the Institute classifies as permanently restricted net assets (a) the original value of gifts donated, (b) the original value of subsequent gifts, and (c) accumulations to the permanent endowment made in accordance with the direction of the applicable donor gift instrument at the time the accumulation is added to the fund. The remaining portion of the donor-restricted endowment fund that is not classified in permanently restricted net assets is classified as temporarily restricted net assets until those amounts are appropriated for expenditure by the Institute in a manner consistent with the standard prudence prescribed by SPMIFA. In accordance with SPMIFA, the Institute considers the following factors in making a determination to appropriate or accumulate donor restricted endowment funds:

- the duration and preservation of the fund;
- 2) the purposes of the donor-restricted endowment fund; general economic conditions; and
- 3) 4) the expected total return.

Endowment net asset composition by type of fund as of June 30, 2012:

	Unrestricted		oorarily ricted	nanently tricted	 Total
Donor-restricted endowment	\$		\$ 6,734	\$ 75,080	\$ 81,814

## Notes to the Financial Statements

## June 30, 2012

#### Investments (continued) Note 3:

9

The allocation of funds held within the investment portfolio is reviewed quarterly and is rebalanced if the actual allocations differ from the targets stated above by more than five percent

The Institute's investments are stated at fair value and are summarized as follows at June 30, 2012:

		2012						
	Cost	Fair Value	Appreciation					
Mutual funds – equities	\$ 1,508,157	\$ 1,537,327	\$ 29,170					
Mutual funds – fixed income	595,293	624,005	28,712					
Total investments	\$ <u>2,103,450</u>	\$ <u>2,161,332</u>	\$ 57,882					

#### Note 4: Fair Value Measurements

In accordance with the "Fair Value Measurements" topic of the FASB ASC, the Institute uses a three-level fair value hierarchy that categorizes assets and liabilities measured at fair value based on the observability of the inputs utilized in the valuation. This hierarchy prioritizes the inputs into three broad levels as follows: Level 1 inputs are quoted prices (unadjusted) in active markets for identical assets or liabilities. Level 2 inputs are quoted prices for similar assets and liabilities in active markets or inputs that are observable for the asset or liability, either directly or indirectly; and Level 3 inputs are unobservable inputs for which little or no market data exists, therefore, requiring an entity to develop its own valuation assumptions. These inputs reflect management's judgment about the assumptions that a market participant would use in pricing the asset and are based on the best available information, which has been internally developed.

#### Financial assets (liabilities) consisted of the following at June 30, 2012:

	Level 1		Level 2		Level 3		Total
Cash and cash equivalents:							
Money market funds (\$37,911 included in							
assets restricted for endowment)	\$	237,058	\$ -	\$	-	\$	237,058
Certificates of deposit (\$42,570 included in							
assets restricted for endowment)		1,255,136	-		-		1,255,136
Investments:							
Mutual funds – equities		1,537,327	-		-		1,537,327
Mutual funds - fixed income		624,005	-		-	-	624,005
	<i>•</i>						
	\$	<u>3,653,526</u>	\$ -	\$	<u> </u>	\$ _	<u>3,653,526</u>

The Institute maintains an account with Vanguard Group for operating, operating reserve and reserve funds. Financial assets include a money market fund and several mutual funds carried at their fair market value and certificates of deposit maturing at various dates. The certificates of deposit are immediately convertible to cash with maturities ranging from three months to nine months.

#### Notes to the Financial Statements

## June 30, 2012

#### Net Asset Classification of Endowment Funds (continued) Note 6:

Changes in endowment net assets for the year ended June 30, 2012:

11

	Un	restricted		Femporarily Restricted		Permanently Restricted	_	Total
Endowment net assets, June 30, 2011	\$	-	\$	6,569	\$	32,420	\$	38,989
Investment return: Interest income Total investment return				<u>165</u> 165	-			<u>165</u> 165
Contributions to perpetual endowmer	ıt		-		-	42,660		42,660
Endowment net assets, June 30, 2012	\$		\$	6,734	\$	75,080	\$	81,814
Permanently restricted net assets: The portion of perpetual endowment funds that is required to be retained permanently either by explicit donor stipulation or by SPMIFA \$								75,080
Total endowment funds classified as permanently restricted net assets								75,080

## Return Objectives and Risk Parameters

While no formal investment or spending policy existed at June 30, 2012, the goal of the Institute was to invest in low-risk vehicles that provide a predictable steam of funding. Endowment assets include those assets of donor-restricted funds that the Institute must hold in perpetuity. Currently, the endowment assets are invested in certificates of deposit.

## Strategies Employed for Achieving Objectives

To satisfy its long-term rate-of-return objectives, the Institute relies on a total return strategy in which investment returns are achieved through current yield (interest income). The Organization targets low-risk investments to achieve its long-term return objectives within prudent risk constraints.

#### Spending Policy

While there was no formal spending policy established at June 30, 2012, any investment income earned on endowment assets is temporarily restricted to be appropriated for expenditure to fund the cost of a lecturer once every three years for the Le Cam Endowment and once every three to four years for the Blackwell Lecture Endowment

# Notes to the Financial Statements

## June 30, 2012

## 12

## Note 7: Retirement Plan

The Institute participates in an employer matching 403(b) retirement annuity plan. The Institute matches 200% of the contributions of eligible employees up to 10% of the employee's gross salary. Employees who have completed three years of service are eligible to participate. The Institute contributed \$11,075 and \$10,557 for the years ended June 30, 2012 and 2011, respectively.

# Note 8: Functional Expenses

Program and general and administrative expenses for the year ended June 30, 2012 were as follows:

	-	Program	General and Administrative	_	Total
Production expenses (see Note 9)	\$	850,431	\$ -	\$	850,431
Editorial expenses (see Note 9)		251,715	-		251,715
Mailing and shipping at press		97,099	-		97,099
Salaries, payroll taxes, and employee benefits		70,385	70,385		140,770
Management fee		93,882	31,294		125,176
Scientific meetings		55,488	-		55,488
Managed meetings		15,479	-		15,479
Supported journal royalty		68,577	-		68,577
Postage and shipping from office		8,056	3,453		11,509
Insurance		14,688	6,295		20,983
Credit card fees and refunds		14,201	-		14,201
Professional fees		-	12,673		12,673
Business meetings		1,726	-		1,726
Membership drives and publicity		8,190	-		8,190
Information technology service		8,804	-		8,804
Storage		7,395	-		7,395
Contributions to other organizations		3,001	-		3,001
Rent and utilities		1,650	1,650		3,300
Administrative services		-	2,685		2,685
Printing, non-journal		901	-		901
Computer equipment and software		2,075	889		2,964
Supplies		543	543		1,086
Office expense and other		2,012	862		2,874
Telephone		442	190		632
Presidential fund		773	-		773
Bad debt expense	-	-	271	_	271
	\$ _	1,577,513	\$ <u>131,190</u>	\$_	1,708,703

## Notes to the Financial Statements

# 14

## June 30, 2012

## Note 9: Production and Editorial Expenses

Production and editorial expenses incurred were as follows:

	_	2012		2011
Production expenses:				
Core publications:				
The Annals of Applied Probability	\$	110,369	\$	115,490
The Annals of Applied Statistics		115,932		164,968
The Annals of Probability		118,221		105,200
The Annals of Statistics		187,130		204,817
Statistical Science		62,675		53,542
IMS Bulletin		20,162		27,951
IMS Collections		-		5,662
IMS Lecture Notes-Monograph Series		223		-
Web page		12,462		11,576
Total core publications		627,174		689,206
Supported publications:				
Annales de l'Institut Henri Poincaré		56,434		57,320
Bernoulli		60,242		58,555
Bernoulli News		3,026		3,209
Brazilian Journal of Probability and Statistics		11,649	_	19,057
Total supported publications		131,351		138,141
Co-sponsored publications:				
Probability Surveys		2,236		348
Statistics Surveys		618		193
Current Index to Statistics		10,802		10,721
Electronic Journal of Statistics		6,615		579
Total co-sponsored publications		20,271		11,841
······································		.,		,-
General publication expenses:				
Electronic operations for all publications		71,635	_	57,022
Total general publication expenses	-	71,635		57,022
Total production expenses	\$ _	850,431	\$	896,210

## Notes to the Financial Statements

## June 30, 2012

## Note 8: Functional Expenses (continued)

13

Program and general and administrative expenses for the year ended June 30, 2011 were as follows:

	_	Program	General and <u>Administrative</u>		Total
Production expenses (see Note 9)	\$	896,210	\$ -	\$	896,210
Editorial expenses (see Note 9)		299,269	-		299,269
Mailing and shipping at press		113,970	-		113,970
Salaries, payroll taxes, and employee benefits		67,304	67,304		134,608
Management fee		95,317	31,773		127,090
Scientific meetings		60,189	-		60,189
Managed meetings		164,169	-		164,169
Supported journal royalty		84,377	-		84,377
Postage and shipping from office		8,512	3,648		12,160
Insurance		14,685	6,294		20,979
Credit card fees and refunds		19,264	-		19,264
Professional fees		-	19,000		19,000
Business meetings		1,184	-		1,184
Membership drives and publicity		10,585	-		10,585
Information technology service		7,890	-		7,890
Storage		7,566	-		7,566
Contributions to other organizations		7,158	-		7,158
Rent and utilities		1,650	1,650		3,300
Administrative services		-	2,476		2,476
Printing, non-journal		3,812	-		3,812
Computer equipment and software		1,786	766		2,552
Supplies		591	591		1,182
Office expense and other		1,104	473		1,577
Telephone		496	213		709
Presidential fund		-	-		-
Bad debt expense	_	-	8,856	_	8,856
	\$ _	1,867,088	\$ 143,044	\$	2,010,132

## Notes to the Financial Statements

## June 30, 2012

## Note 9: Production and Editorial Expenses (continued)

15

Editorial expenses:	-	2012	-	2011
The Annals of Applied Statistics	\$	-	\$	215
Current Index to Statistics	φ	32,137	φ	30,000
IMS Bulletin		72,329		69,074
WWW editor		28,546		81,979
Managing and production editors		97,703		95,501
Central editorial office	-	21,000	-	22,500
Total editorial expenses	\$ _	251,715	\$	299,269
Note 10: Net assets				
	-	2012	-	2011
The following are net assets available at June 30:				
Unrestricted:				
Undesignated	\$	2,466,496	\$	2,020,541
Council-designated:				
Dorweiller Fund		3,600		3,600
Hotelling Fund		1,600		1,600
New Researchers Meeting Fund		31,533		31,533
Development Fund		25,000		25,000
Laha Fund	-	10,486	-	17,761
Total Council-designated	-	72,219	-	79,494
Total unrestricted		2,538,715		2,100,035
Temporarily restricted:				
Schramm Lecture Fund		15,265		-
Tweedie Memorial Fund		12,985		13,642
Open Access Fund		4,336		3,738
Le Cam Earnings Fund	-	6,734	-	6,569
Total temporarily restricted		39,320		23,949
Permanently restricted:				
Blackwell Lecture Endowment		42,570		-
Le Cam Endowment	-	32,510	-	32,420
Total permanently restricted	-	75,080	-	32,420
Total net assets	\$ _	2,653,115	\$	2,156,404

AAP Annual Report (from Andrew Barbour and Timo Seppalainen)

In the period 1. January 2012 -- 31. December 2012 the Annals of Applied Probability received 310 submissions.

25 were withdrawn by the authors, 176 were rejected (13 with the possibility of resubmission), 39 were accepted, and 70 are still in the system (some awaiting the authors' revision). The median time to process those rejected was less than 1 month, and the 75th percentile 3.7 months; the median time to acceptance, including revision, was 7.5 months.

The number of submissions in January-June 2013 was 156.

\*\*

Of the 75 papers that were \*accepted in the above period\*, the median time to acceptance, including revision, was about 9.5 months, and the 75th percentile around 1 year.

Of the 183 papers that were \*rejected in the above period\*, the median time to rejection was less than a month, and the 75th percentile was about 4 months.

\*\*

Timo Seppalainen took over as Editor in January 2013. The editorial board was renewed. 16 associate editors who had served two consecutive terms stepped down. 18 associate editors continued and 15 new ones were recruited, mainly from the ranks of younger probabilists.

The current editorial board: David Anderson, Erwin Bolthausen, Mireille Bossy, Amarjit Budhiraja, Zhen-Qing Chen, Francois Delarue, Ron Doney, Randal Douc, Rick Durrett, Patrik Ferrari, Luiz Renato Fontes, Peter Friz, Giambattista Giacomin, Carl Graham, Alexander Holroyd, David Hobson, Remco van der Hofstad, David Levin, Vlada Limic, Eyal Lubetzky, Jean Mairesse, Jean-Francois Marckert, Soumik Pal, Mathew Penrose, Philip Protter, Kavita Ramanan, Brian Rider, Sebastien Roch, Chris Rogers, Mete Soner, Prasad Tetali, Nizar Touzi, Benedek Valko.

# ANNALS OF APPLIED STATISTICS: 2012 ANNUAL REPORT

STEPHEN E. FIENBERG, EDITOR-IN-CHIEF

2012 marked the sixth full year of operation for The Annals of Applied Statistics (AOAS). Submissions continued to increase, these being the yearly totals:

Year	2007	2008	2009	2010	2011	2012
No. Submissions	286	274	352	418	468	472

Submissions thus far in 2013 slightly exceed of those in 2012, up about 5% for January through May. This sixth-year growth has been attributable to the enthusiasm and vision of the founding AOAS Editor-in-Chief, Brad Efron, and to those he helped recruit to the effort. The ultimate acceptance rate of submissions is about 20%.

One of the selling points for AOAS is the relatively short time required for review of a paper: for the papers submitted in 2012, 80% of all submissions received a decision within 3 months and over 50% of decisions occurred within two weeks with over a third within a few days of submission. Here is a more detailed summary of the time to first decision:

No. Days to First Decision	$\leq 7$	8-30	31-60	61-90	91-120	121-150	151-180	$\geq 181$
No. Manuscripts	148	62	56	86	52	24	15	23

The original idea for AOAS, and the plan for its form had separate Area Editors. IMS Council appoints the Editor-in-Chief (EIC) and the EIC appoints the Area Editors who make decisions on the manuscripts assigned to them. This structure seemed speculative at the time, but as Brad Efron noted in previous reports to Council, that speculation seems to have born fruit in the case of AOAS.

As I assumed the position of EIC from Brad Efron in January 2013 there were three central Area Editors, Karen Kafadar (IndianaUniversity) for biology, medicine, & genetics; Tilmann Gneiting (University of Heidelberg) for physical science, computation, engineering, and the environment; and Susan Paddock (RAND) for social science, government, and economics. General Topics Editor Kenneth Lange (UCLA) was the fourth Area Editor and stopped receiving new manuscripts at the end of 2012. All the Area Editors have done a terrific job and Tilmann's appointment, in particular, has led to a notable increase in physical science papers coming from overseas. In fact, AOAS submissions are remarkably international. The three continuing Area Editors have been in place for at least three years

now and this stability has led to a more uniform set of standards and review practices for AOAS. Reviewing at AOAS typically takes much less time than at other IMS journals

In January, I worked with the three continuing Area Editors to revise our criteria for publication and review to make much clearer the fact that applications and data are central to AOAS papers, and that AOAS is really not a methodology journal where papers include data for numerical illustration. The new language has been posted on the IMS webpage; it allows the Area Editors to communicate more effectively with authors on what we expect in a prototypic AOAS paper. We anticipate that this clarified mission statement will, over time, improve the appropriateness and quality of submissions that we receive.

I have appointed three new Area Editors. Edoardo Airoldi (Harvard University) began effective January 1 2013 as a general topics area editor replacing Ken Lange. He is handling papers involving machine learning tools and network models, as well as helping out in bioinformatics area, slightly relieving the load borne by Karen Kafadar. In addition, Susan Paddock asked to step down at the end of August, and after extensive consultation I have appointed two additional Area Editors, Brendan Murphy (University College Dublin) and Beth Ann Griffin (RAND). Brendan will assume much of responsibility for the social sciences and Beth Ann's portfolio will be focused at the interface of the social sciences and policy as well as social science and biostatistics. This will bring us up to 5 Area Editors in September.

I am personally indebted to both Elyse Gustafson and Geri Mattson for their consistently generous support of the journal's operations. Geri in particular helps make our arrangement with EJMS fully functional.

## report.txt

Annals of Probability Editor's report Prepared by Krzysztof Burdzy

In the period from January 1, 2012 to December 31, 2012, the Annals of Probability received 301 submissions. In the period from January 1, 2013 to June 4, 2013, the journal received 130 submissions. In the period from January 1, 2012 to June 4, 2013, 38 papers were accepted, 227 rejected, 15 rejected with resubmission and 5 withdrawn. If we include papers that are at different stages of revision, the acceptance rate is about 20%. The statistics show only the numbers for the current editor (K. Burdzy). Some papers were processed (accepted or rejected) by Ofer Zeitouni, the former editor, after January 1, 2012.

Late in 2012, I discovered that the backlog was so large that the time between acceptance and print was about 2 years. I requested extra pages in 2013 and my request was granted. Specifically, the IMS Council approved the following actions. FIRST ACTION: To increase the page count for five of the six issues in 2013 to 650 pages per issue. SECOND ACTION: The production of one double issue in May 2013.

I plan to request the traditional 2,400 pages for 2014. It seems that with the current acceptance rate, this number of pages will be sufficient to keep the backlog at the steady state.

Sincerely, Chris Burdzy

# The Annals of Statistics, 2012 Annual Report

Peter Hall and Runze Li, Editors

SUBMISSIONS: We received 555 submissions in 2012, a record high relative to the historical norm (in comparison to 319, 362, 323, 343, 397, 479, 490, 505, 532, 502 submissions in 2002–2011, respectively). Our editorial policy continues to emphasize that The Annals of Statistics aims at publishing research papers of highest quality, reflecting the many facets of contemporary statistics, including all mathematical, methodological, computational and interdisciplinary work. An overview of the data is given in Figure 1.

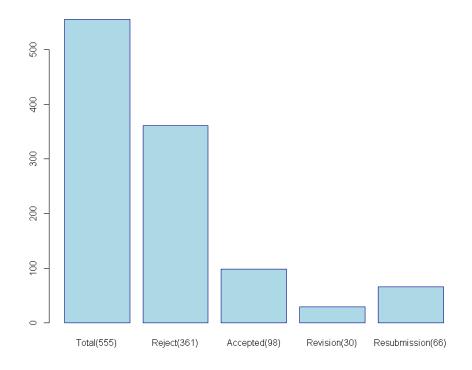


Figure 1: Submissions in 2012.

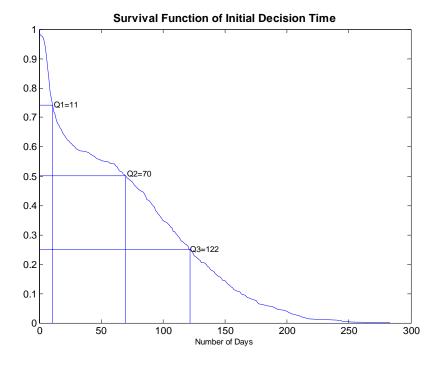
ACCEPTANCE RATE: During 2012, we accepted 98 papers, rejected 361, handled 30 requests for revision (major and minor) and rejected 66 papers with encouragement to resubmit. The acceptance rate among these 555 papers is 17.76% (15% in 2011, 11% in 2010, 20% in 2009). Note that this is not the acceptance rate among the manuscripts submitted in 2012.

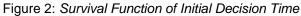
BACKLOG: During 2012, we printed 3175 pages (3443 pages in 2011, 3841 pages in 2010, 4312 pages in 2009). In 2013 we expect to use at most an allotment of 3600 pages. Currently, there is no backlog.

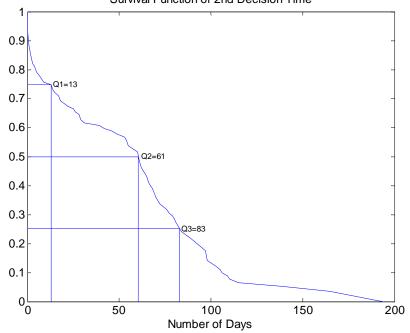
PAGE REQUEST: We request an allotment of 3800 pages for 2014.

REVIEW TIMES: The quartiles of the distribution of the initial decision times for manuscripts submitted in 2012 are 11 days, 70 days and 122 days. The corresponding quartiles from 2011 are 13 days, 78 days and 117 days. The details of the review times are summarized in Figure 2, which provides an estimated survival curve of initial decision time for submissions in 2012. Figure

3 provided an estimated survival function of the second decision time for submission in 2012.







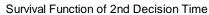


Figure 3: Survival Function of 2nd Decision Time

# Annual Report - *Statistical Science* Jon A. Wellner, Executive Editor June, 2013

As of May 31, 2013, 48 manuscripts were at various stages of review or revision for *Statistical Science*. From June 1, 2012 – May 31, 2013, 141 manuscripts were submitted. Of the manuscripts submitted during this period, 85 were rejected, 34 are still in various stages of review or revision, and 21 have been accepted.

Month	Received	Rejected	Rejected Under review or revision	
June 12	11	7	4	0
Jul 12	12	10	0	2
Aug 12	15	12	1	2
Sept 12	16	6	3	7
Oct 12	8	3	2	3
Nov 12	11	8	0	3
Dec 12	8	7	1	0
Jan 13	17	7	8	2
Feb 13	9	3	4	2
Mar 13	8	6	2	0
Apr 13	13	9	3	1
May 13	13	7	6	0
Total	141	85	34	22

I am now in my third and last year as Executive Editor of *Statistical Science* after taking over from David Madigan on January 1, 2011. Volume 27 of Statistical Science contained 608 pages. I expect that the total manuscript pages for 2013 will be a bit over 600. I am requesting the same number of manuscript pages for 2014.

A special issue on sparsity and regularization methods edited by Tong Zhang and myself appeared in 27(4). A set of special articles for the Mathematics of Planet Earth year is currently being edited by Michael Stein and Michel Dekking and will very likely appear in 28(4), while a collection of articles concerning ``Big Bayes success stories'', edited by Christian Robert and Kerrie Mengersen, will appear early in 2014. A special issue on ``missing data, causal inference, and semiparametric models'' edited by Thomas Richardson and Andrea Rotnitzky is also underway and should appear sometime in 2014 (Volume 29). Another collection of articles on ``contemporary statistical software design'' is being edited by Vincent Carey and Dianne Cook.

I continue to be very grateful to both Mattson Publishing Services and VTEX, who continue to be very responsive to the needs of *Statistical Science*. EJMS provides an excellent platform for journal management. The present Editorial Board is doing a wonderful job, and I am very grateful to each and every one of the members: Vincent Carey, Rong Chen, Dianne Cook, Michel Dekking, Ed George, Peter Hoff, Michael Friendly, Ed George, Sylvie Huet, Shane Jensen, Samuel Kou, David Madigan, Peter Mueller, Jim Pitman, Annie Qu, Nancy Reid, Thomas Richardson, Andrea Rotnitzky, Thomas Severini, Glenn Shafer, Michael Stein, Jon Wakefield, Guenther Walther, and Tong Zhang. I receive invaluable editorial support from Elyse Gustafson, Patrick Kelly, Geri Mattson and Michael Phelan. I

want to also acknowledge the helpful support and counsel provided by the previous editors, David Madigan and Ed George.

Last but not least, my replacement has already been named: Statistical Science will be in very good hands when Peter Green takes over the job of (Executive) Editor on 1 January 2014. (Peter has already initiated some changes; in particular he has asked that his title be changed from ``Executive Editor'' to ``Editor'' – and that the titles of the members of the editorial board be changed from ``Editor'' to ``Associate Editor'' to bring us more into line with other IMS journals. (This change was supported by the recent past and current Executive Editors, and has been approved by the IMS Council.)

# Report of the Managing Editor Probability and Statistics

Michael Phelan

The page counts for 2012 turned out as follows: 2702 printed pages for Annals of Probability, 2614 for Annals of Applied Probability, 3171 for Annals of Statistics, 1995 for Annals of Applied Statistics, 606 for Statistical Science. The tables, below, provide details for each journal.

The Annals of Probability							
Volume 40	2012 Printed Pages	Volume 41	2013 Printed Pages				
No. 1	435	No. 1	443				
No. 2	455	No. 2	670				
No. 3	484	No. 3A	652				
No. 4	483	No. 3B	634				
No. 5	437	-	-				
No. 6	<u>408</u>	-	_				
TOTAL	2702	TOTAL	2399				

The Annals of Applied Probability

Volume 22	2012 Printed Pages	Volume 23	2013 Printed Pages
No. 1	455	No. 1	425
No. 2	424	No. 2	431
No. 3	420	No. 3	431
No. 4	443	-	-
No. 5	420	-	-
No. 6	452	-	_
TOTAL	2614	TOTAL	1287

June, 2013

The minute of Statistics					
Volume 40	2012 Printed Pages	Volume 41	2013 Printed Pages		
No. 1	637	No. 1	400		
No. 2	646	No. 2	653		
No. 3	649	No. 3	244		
No. 4	423	-	-		
No. 5	405	_	-		
No. 6	411	-	<u>-</u>		
TOTAL	3171	TOTAL	1297		

The Annals of Statistics

The Annals of Applied Statistics

Volume 6	2012 Printed Pages	Volume 7	2013 Printed Pages
No. 1	427	No. 1	612
No. 2	402	-	-
No. 3	517	-	-
No. 4	<u>649</u>	-	_
TOTAL	1995	TOTAL	612

Statistical Science

Volume 27	2012 Printed Pages	Volume 28	2013 Printed Pages
No. 1	159	No. 1	134
No. 2	158	No. 2	147
No. 3	127	-	-
No. 4	<u>162</u>	-	<u>-</u>
TOTAL	606	TOTAL	281

# IMS Bulletin: Report to Council 2013

The *IMS Bulletin*, published 8 times per year, is the news organ of the institute. Our aim is to bring IMS members (and other readers) news about IMS activities and members, and items of interest to statisticians and probabilists around the world.

Dimitris Politis (UC San Diego) is Editor for the term 1 January 2011 to 31 December 31, 2013; the incoming Editor is Anirban DasGupta (Purdue). Tati Howell (London, UK) is Assistant Editor. Our Contributing Editors are Peter Bickel, Anirban DasGupta, Xiao-Li Meng, Nicole Lazar and Terry Speed. We have three regular columns written by Terry, Xiao-Li and Anirban.

We invite responses from readers to these columns, and other articles, in the IMS Bulletin blog website, located at http://bulletin.imstat.org. The website is based on a WordPress blog, maintained by Tati, in which the news items and articles from the front section of each issue are uploaded. At the time of writing there are 218 articles posted. Since we only occasionally now receive a 'Letter to the Editor' (though these are still welcome), we hoped that the interactivity offered by the website, with readers able to comment on blog posts, would engage more with IMS members. There are now 55 comments across the site – more than the 'Letters to the Editor,' but still fewer than we hoped. Comment spam is a tedious by-product of having a blog site, but since installing Akismet to filter this, the time spent dealing with spam has dropped dramatically. Google Analytics reports 15,587 site visits for the period 1 July 2012–1 July 2013. The number of visitors peaks each month as the eBulletin is sent out, which contains a link to the latest issue, so clearly some members access IMS news in this way. We also post on the IMS Facebook page when issues are released (you can find us on Facebook at https://www.facebook.com/IMSTATI).

In the past year, we have published obituaries for Robert (Bob) Blumenthal, George Box, Donald Burkholder, George Casella, W. Jackson (Jack) Hall, Dayanand Naik, Damaraju Raghavarao, William (Bill) Studden, and Martin Wilk. Obituaries are also in preparation for Jim Durbin, Wenbo Li and Maurice Priestley. If Council members hear of the death of any IMS members or fellows, please let us know (email bulletin@imstat.org) as we may not have yet heard. We would rather hear twice than not at all.

In an effort to promote awareness of the content of IMS journals, we publish lists of recent papers, rotating around IMS core, co-sponsored and supported journals (including electronic journals).

As ever, we rely very much on IMS members to volunteer their news. We invite all members, and particularly Council members, to be proactive in this area. If you can write or solicit an article, or even just come up with an idea for an article, we will be happy to discuss it with you. Please don't be shy!

If anyone has comments, suggestions or feedback, please email **bulletin@imstat.org** or leave a comment on our blog.

Dimitris Politis & Tati Howell July 2012 IMS-CUP Monographs and Short Text-Books

Report to IMS Council

The editors have continued the search for new proposals of high quality, have reviewed submitted proposals and, where appropriate, have recommended to CUP the issuing of contracts. The current position is as follows:

Monographs: Published, 2: In production, 1: Contracts signed, 2.

Text-books: Published, 1: In production, 2: Contracts signed, 3.

We are anxious to receive new proposals which may be sent to any of us.

David Cox Ben Hambly Susan Holmes Xiao-Li Meng

June 2013

# Report on ELECTRONIC JOURNAL OF PROBABILITY (EJP)

for the period July 2012 - June 2013

# EJP/ECP Editorial Board

At the end of 2012, Timo Seppalainen (previous Chief-Editor of ECP), taking the editorship of the Annals of Applied Probability, left the EJP-ECP Editorial Board. In addition, Amarjit Budhiraja and Franco Flandoli decided for personal reasons to quit.

Together with Anton Bovier, Chief-Editor of ECP, to replace them and to reinforce areas of expertise in the board, we asked

Noam Berger (Jerusalem), Massimiliano Gubinelli (Paris), Vladimir Koltchinski (Atlanta), Annie Millet (Paris), Hirofumi Osada (Fukuoka)

to join the board.

The common EJP/ECP Editorial Board on January 2013 consists thus of:

Noam Berger, Marek Biskup, Anton Bovier (Chief-Editor ECP), Krzysztof Burdzy (also technical support), Philippe Carmona, Djalil Chafaï (also Managing Editor), Julien Dubédat, James A. Fill, Nina Gantert, Friedrich Götze, Massimiliano Gubinelli, Andreas Greven, Martin Hairer, Vladimir Koltchinski, Michel Ledoux (Chief-Editor EJP), Malwina Luczak, Annie Millet, Peter Mörters, Elchanan Mossel, Leonid Mytnik, Hirofumi Osada, Sandrine Péché, Ross Pinsky, Alejandro Ramirez, Brian Rider, Sunder Sethuraman, Josef Teichmann, Balint Tóth, Nizar Touzi, Anton Wakolbinger, Feng-Yu Wang, Nobuo Yoshida.

The Editorial Board is doing an excellent job, full of expertise and attracting high quality contributions.

# OJS managing system

The OJS managing system from PKP is now working almost perfectly, and the Associate Editors use it efficiently. Authors also do not seem to have trouble with it.

The Managing Editor Djalil Chafaï is doing a fantastic job in helping the Associate Editors and the authors, and in editing the accepted papers in almost no time.

The web page

http://djalil.chafai.net/EJP-ECP/#annual-report

maintained by Djalil Chafaï presents a complete view on the status and statistics of both EJP et ECP.

# EJP statistics for 2012

Submitted: 316

Published: 90 (possibly after 2012)

Still in process: 52

Redirected to ECP: 36 (inaccurate)

Rejected (archived): 174

Days to rejection (for 174 papers): av:70.7, sd:80.0, Q25:3.0, Q50:25.5, Q75:133.0, Q100:303.0

Days to first decision (for 296 papers): av:102.0, sd:80.8, Q25:9.8, Q50:107.0, Q75:157.2, Q100:336.0

# EJP statistics for the period January 2012 – 15 June 2013

Submitted: 161

Published: 3 (possibly after 2013)

Still in process: 84

Redirected to ECP: 28 (inaccurate)

Rejected (archived): 74

Days to rejection (for 74 papers): av:18.5, sd:36.9, Q25:0.0, Q50:2.5, Q75:13.0, Q100:164.0

Days to first decision (for 81 papers): av:23.6, sd:40.7, Q25:0.0, Q50:3.0, Q75:19.0, Q100:164.0

# Conclusion

EJP has been pretty much successful during the year, with an important and steadily increasing number of submissions, some of them at the very top level in probability theory. The large number of submissions allows the Editorial Board to apply a strict editorial policy, at the highest level.

Publishing in EJP/ECP has only advantages: excellent scientific level, fast electronic publication, totally free access, nice hyperlinked PDF file.

June 18th, 2013 Michel Ledoux EJP Chief-Editor

# Annual Report Electronic Journal of Statistics David Ruppert and George Michailidis Jun 15, 2013

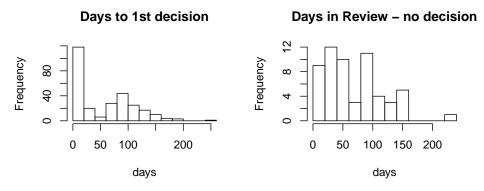
This report covers the period roughly between Jul 1, 2012 to Jun 15, 2013. David Ruppert was editor until Dec 31, 2012 at which point George Michailidis became editor.

The number of submissions to the *Electronic Journal of Statistics* has grown steadily during the 6.5 years since it began in 2007. The acceptance rate has held steady at around 35%. Most papers take less than 4 months to receive a first decision with the median time about 1.5 months.

The numbers of articles are listed by decision in the table below for the last three years. The papers for 2012-13 are papers where a decision was made during the period May 29, 2012 - Jun 7, 2013 or were awaiting a decision or submission of a revision on Jun 7, 2013. One sees from the table that the acceptance rate during the 2012-13 period was 118/(118+223) = 34.6%, which is very similar to the acceptance rate of 35.7% during 2011-12.

Decision	2010 - 11	2011 - 12	2012 - 13
Accepted	54	83	118
Awaiting decision	5	68	73
Awaiting revision	34	39	31
Rejected	99	149	223
Withdrawn	9	4	21
Total	251	343	466

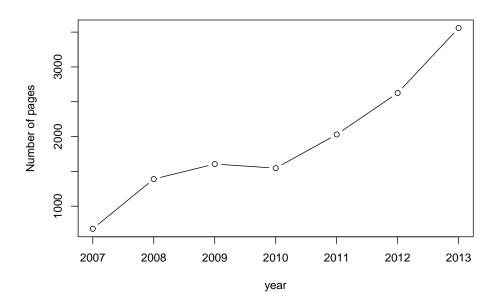
There were 338 papers submitted between Jul 1, 2012 and Jun 12, 2013. Of these, 276 have received a first decision and the median time to that decision was 41 days. For the remaining 62 papers awaiting a first decision, the median time they have been in review is 55.5 days. Histograms of the two distributions are below.



The number of published pages by calendar year since the journal began in 2007 are in the following table. The number for 2013 is as of Jun 15.

year	# pages
2007	676
2008	1390
2009	1605
2010	1546
2011	2030
2012	2626
2013	1631

These data are plotted below. The number of pages for 2013 was multiplied by 12/5.5 to extrapolate to a full year.



# Committee on Asia Pacific Rim Meeting Report

The 3rd IMS-Asia Pacific Rim meeting is going to take place at Howard International House in Taipei, Taiwan, during the period June 30 - July 3, 2014. There will be 2 plenary sessions, 19 distinguished lecture sessions whose formats are similar to those of IMS Medallion Lectures, 50 invited paper sessions, some number of topic-contributed and contributed sessions, and one large poster session. The committee chose two plenary speakers by vote. They are Jianqing Fan at Princeton University and Persi Diaconis at Stanford. Both confirmed to deliver plenary lectures. All invited sessions will be organized by September 30, 2013. The local organizing committee is led by Ming-Yen Cheng at National Taiwan University. The conference website is

http://ims-aprm2014.ntu.edu.tw/

Reported by Byeong U. Park and Feifang Hu

# Annual report of the IMS Committee on Finance June 2013

For the details of the IMS financial position, see the 2012 audited financial statements at <u>http://imstat.org/officials/reports.html</u>.

The Treasurer's report and IRS Form 990 will ultimately be posted there too. In the meantime, the Treasurer's report is in the June-July 2013 Bulletin: http://bulletin.imstat.org/wp-content/uploads/Bulletin42\_4.pdf As described in that report: "The Council and Executive Committee made it a high priority to have an operational balanced budget in FY2010 and beyond and to increase net assets back to the levels appropriate for our revenue and expense stream. Net revenues are currently being invested annually into long term reserves. The IMS currently has 1.5 years of expenses in long term reserve. Based on the current publishing climate, the IMS aims to have strong long term reserves."

The IMS is making good progress towards establishing such reserves.

**Annual Audit and Financial Statements**: The usual audit for the fiscal year July 1, 2011-June 30, 2012 took place. There is nothing noteworthy to report. This was the second year of using the new auditors Ciuni and Panichi and the transition has been a smooth one.

**Annual Review of IMS Investments:** The IMS Investment Policy, as approved by Council, states that:

"The IMS is committed to a policy of low-cost long-term indexed investing with minimal intervention. IMS investment funds (that is, the funds other than the operating funds or the operating reserve) should be invested as follows: 270% in domestic and international equities, 30% in fixed-income instruments. The equity investment should be placed in low-cost index funds. 270% of the equity pool should be invested in an index fund that tracks the overall US stock market, such as the MSCI US Broad Market Index. 30% of the equity pool should be invested in an index fund that tracks the overall US stock market, such as the MSCI US Broad Market Index. 30% of the equity pool should be invested in an index fund that tracks the overall international stock markets, such the MSCI EAFE + Emerging Markets Index. The fixed income investments should be invested in a low-cost index fund that tracks the overall US bond market, such as the Barclays Capital U.S. Aggregate Float Adjusted Index. The funds should be reviewed quarterly and should be rebalanced if the actual allocations differ from the targets given here by more than 5%. All dividend and capital gains will be reinvested."

In 2013, when net revenue from fiscal year 2012 was invested in long term reserves, the new funds were used to realign the investment percentages with their targets. No other adjustments were made to allocations in the period July 1, 2012-May 31, 2013.

**Change to calendar fiscal year:** Effective 2013, the IMS moved from a July 1-June 30 fiscal year to a January 1-December 31 fiscal year. Having the fiscal year line up

with the calendar year will allow the financial cycle to line up more clearly with dues, subscriptions and publishing cycles. A 6-month mini-audit and full tax filings will be performed for July 1-December 31, 2012.

# 2013 IMS-China Report

By Jianqing Fan June 17, 2013

The IMS-China, an affiliated and subordinated division of the Institute of Mathematical Statistics (IMS), is governed by the rules and regulations of the IMS and IMS-China Guidelines. This report summarizes main activities of the IMS-China since 06/15/2012.

# 1) Memberships

As of June 8, 2013, there are 107 IMS members from China, 24 of them indicating the affiliations with IMS-China. Many of IMS members from China forget to indicate the affiliations of IMS-China, even though they think they are IMS-China members. Many members find some challenges to pay the member due at the time of renewal. The IMS-China executives have made a determined effort to encourage members to renew their memberships. The issues on membership campaigns were addressed at the 2013 IMS-China conference in Cheng-Du.

Despite small number of membership, IMS-China is highly regarded and influential in Chinese Probability and Statistics communities. Many people feel proud to be associated with the IMS-China, though they are not members of IMS-China. IMS-China plays a leading role in the development of statistics and probability in China.

# 2) Election

In accordance with its guidelines, IMS-china holds no election in the odd years.

# 3) Meeting

The IMS-China's biannual meetings highlight its activities. It attracts both probabilitists and statisticians from China and international communities. The scientific level is the same as that of any other IMS co-sponsored meetings.

The fourth IMS-China meetings will take place in Chengdu from June 30 to July 4, 2013. There will be around 450 attendees, among which about 200 from mainland China, and around 250 from other countries including USA, UK, Australia, Canada, France, Korea, New Zealand, Russia and Singapore. The preparation of this meeting is in a great shape now. The scientific program includes one plenary talk on probability and one plenary talk on statistics, two special invited lecturers on probability and four special invited lectures on statistics, 20 invited talk sessions on probability and 53 invited talk sessions on statistics, and 16 contributed talk sessions.

There are total about 400 talks in this meeting.

The meeting was co-sponsored by

- IMS-China
- IMS
- Chinese Society of Probability and Statistics
- Chinese Association of Applied Statistics
- Mathematical Center of Ministry of Education, China
- National Natural Science Foundation of China
- Southwestern University of Finance and Economics, Chengdu

The scientific committee is co-chaired by

- Runze Li, The Pennsylvania State University
- Shige Peng, Shandong University

and the local organization committee is co-chaired by

- Min Chen, AMSS, Chinese Academy of Sciences
- Fuzhou Gong, AMSS, Chinese Academy of Sciences
- Huazhen Lin, Southwestern University of Finance and Economics
- Dainming Shi, Southwestern University of Finance and Economics

4) Finance

IMS china does not have any financial accounts nor does it have financial affiliations with IMS.

# Annual Report 2013

# IMS Ad Hoc Committee: Mathematics of Planet Earth 2013

# June 21, 2013

# Chair: Tilmann Gneiting

**Members:** Hans Kuensch, Judith Rousseau, Aurore Delaigle, Jean Opsomer, Ruth Williams, Elyse Gustafson (IMS Exec); Mark Bebbington, Frank Den Hollander, Montse Fuentes, Richard Gibbens, Bing Han, Doug Nychka, Byron J. T. Morgan, Michael Stein (members); David Madigan (IMS Committee: Select Editors); Jon Wellner (IMS Editor)

**IMS Publications** IMS activities concerning the "Special Year for Mathematics of Planet Earth 2013" (MPE 2013) have focused on publications.

The Annals of Applied Statistics published a Section on the "Special Year for Mathematics of Planet Earth 2013" within the December 2012 issue, comprising ten regularly submitted papers that span the four themes of the special year, A Planet to Discover, A Planet Supporting Life, A Planet Organized by Humans, and A Planet at Risk. The editorial for the special section (Gneiting 2012) has been uploaded as an enclosure to this report.

At *Statistical Science*, Editor Jon Wellner and Guest Editors Michel Dekking and Michael Stein are preparing a special issue of invited review papers on the "Special Year for Mathematics of Planet Earth 2013". Four special section papers have been accepted and are available at the journal website. Four or five more papers are expected to be accepted during the next few weeks and the special section is very likely to appear in the November 2013 issue.

# Enclosure

Gneiting, T. (2012). Section on the special year for Mathematics of Planet Earth (MPE 2013). Annals of Applied Statistics **6**, 1349–1351.

# SECTION ON THE SPECIAL YEAR FOR MATHEMATICS OF PLANET EARTH (MPE 2013)

# BY TILMANN GNEITING

## Universität Heidelberg

Dozens of research centers, foundations, international organizations and scientific societies, including the Institute of Mathematical Statistics, have joined forces to celebrate 2013 as a special year for the Mathematics of Planet Earth. In its five-year history, the *Annals of Applied Statistics* has been publishing cutting edge research in this area, including geophysical, biological and socio-economic aspects of planet Earth, with the special section on statistics in the atmospheric sciences edited by Fuentes, Guttorp and Stein (2008) and the discussion paper by McShane and Wyner (2011) on paleoclimate reconstructions [Stein (2011)] having been highlights.

As a prelude to the special year for the Mathematics of Planet Earth, and welcoming the concurrent International Year of Statistics, the December 2012 issue of the *Annals of Applied Statistics* features a special section dedicated to statistical aspects of the study of planet Earth. The section is comprised of ten papers that span the four themes of the special year, *A Planet to Discover*, *A Planet Supporting Life*, *A Planet Organized by Humans* and *A Planet at Risk*.

Three of the papers in this section relate to the history of planet Earth. Reitan, Schweder and Hendriks (2012) look into the deep past, studying time series of cell size evolution in marine algae, Erästö et al. (2012) merge distinct paleoclimate reconstructions, and Baggaley et al. (2012) consider population dynamics in the late Stone Age. Reich and Shaby (2012), Sigrist, Künsch and Stahel (2012), Cooley, Davis and Naveau (2012) and Jona-Lasinio, Gelfand and Jona-Lasinio (2012) study the atmosphere and the oceans of our planet, looking at output from regional climate models, short term predictions of precipitation, air pollutants and wave direction data, respectively. Biological aspects of planet Earth are addressed by Illian, Sørbye and Rue (2012) who consider rainforest ecosystems and the foraging behavior of a particularly popular inhabitant of our planet, the koala. Finally, Chiou (2012) and Lahiri et al. (2012) set out to solve problems of prediction and estimation, respectively, that arise in transportation engineering.

The challenges posed by a planet at risk have been a major driver in the development of statistical theory and methodology, and the papers in this special section document the use of state of the art techniques in addressing critical real world

Received September 2012.

Key words and phrases. Mathematics of Planet Earth 2013.

problems. Not surprisingly, time series analysis, spatial and spatio-temporal statistics play prominent roles in the special section papers, including the use of point processes, Gaussian random fields, max-stable processes and stochastic differential equations, with functional data methods frequently addressing similar tasks. One current challenge is to develop parsimonious, physically realistic models for multivariate global data that can handle complex nonstationarities in space and time [Jun and Stein (2008), Bolin and Lindgren (2011)]. Reich and Shaby (2012) and Cooley, Davis and Naveau (2012) develop the fast-paced field of extreme value statistics, including its fruitful and important links to spatial statistics, which have recently been reviewed by Davison, Padoan and Ribatet (2012). Another major methodological challenge lies in the marriage of analytic, numerical and statistical techniques in inference or forecasting problems, as discussed or touched upon by Baggaley et al. (2012), Reich and Shaby (2012), Jona-Lasinio, Gelfand and Jona-Lasinio (2012) and Sigrist, Künsch and Stahel (2012).

State of the art applied statistical work is inevitably computational. Developments of note in this context include the advent of the integrated nested Laplace approximation [INLA; Rue, Martino and Chopin (2009)] technique in Bayesian computing, which Illian, Sørbye and Rue (2012) make available for fitting complex spatial point processes, and the ubiquity of massive data sets, which require the adaptation of classical techniques, as explored by Lahiri et al. (2012) in the case of bootstrap resampling.

Undoubtedly, mathematical and statistical techniques play key roles in the multidisciplinary scholarly efforts that address the challenges faced by planet Earth. At the *Annals of Applied Statistics*, it is our continued goal to publish cutting edge research that can help resolve these critical issues. Simultaneously, our sister journal *Statistical Science* is preparing a special issue with invited reviews of probabilistic and statistical facets of the scientific study of our planet.

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# Report of the Memorial Committee

This year's (Aug, 2012- Aug 2013) committee consists of Rudy Beran, Hans Foellmer and Soumen Lahiri.

Obituaries have been published in the IMS Bulletin on some of the renowned statisticians and probabilists who passed away during the year including George Casella, Dayanand Naik, Bob Blumenthal, Damaraju Raghavarao, and Donald L. Burkholder.

Efforts are underway to commemorate the contributions of Donald Burkholder and George Box, which would most likely materialize next year (Aug 2013-Aug 2014).