

# Newsfeeds and Umbrella Groups

Erik Altman, SGB Chair altmane@acm.org

October 1, 2013

### SGB EC Team - Slide 1





### Elisa Bertino – SIG Awards Advisor

- Act as liaison for SIG leaders and Awards Committee.
- Help SIG leadership with award proposals and their approval process.



### Will Tracz - SIG Viability Advisor

- Oversee transitional SIGs
- Work with SIGS scheduled for program reviews
  - Ensure that presentations conform to SGB requirements.
  - Ensure SIG leadership is prepared for issues that might arise during viability reviews.
- Act as the SIG election liaison



### Yannis Ioannidis – SGB Conference Advisor

Oversee developing conference activity to be sponsored by the SGB.



**Patrick Madden** – SGB EC Vice Chair for Operations, Publications Advisor Preside over SGB and SGB EC Meetings.

Oversee SIG Liaisons to ACM Committees and Boards.



### Renee McCauley – New SIG Advisor

- Act as liaison for newly chartered SIGs.
- Help nurture and support new SIG leadership as they develop programs and activities.



### **Pradip Bose** – SIG Development Advisor

- Identify emerging technical areas.
- Work with individuals and groups interested in forming SIGs.

### SGB EC Team - Slide 2





Vicki Hanson

SIG Board Past Chair



**Brent Hailpern** 

SGB Rep to ACM Council



**Andrew Sears** 

SGB Rep to ACM Council



**David Wood** 

SGB Rep to ACM Council



Donna Cappo

SIG Liaison from ACM Headquarters

### **ACM Council**



President Vinton Cerf

Alain Chesnais Pat Ryan Past President ACM COO

Vice President Alexander Wolf

Secretary/Treasurer Vicki Hanson

Publications Board Co-Chair Jack Davidson, Joe Konstan

Erik Altman SIG Governing Board Chair

SGB Council Representative:

Brent Hailpern

Direct SGB **Andrew Sears** Representation

**David Wood** 

Member-at-Large:

- Eric Allman
- Ricardo Baeza-Yates
- Cherri Pancake
- Radia Perlman
- Mary Lou Soffa
- **Eugene Spafford**
- Salil Vadhan

ACM CEO John White

### Umbrella Groupings of SIGs



Math / Theory: ACT, SAM, PLAN, ecom

Processor Design: ARCH, MICRO, DA, BED, MOBILE

Software: SOFT, PLAN, OPS, BED, APP, WEB, SIM, GRAPH, Ada

Networking: COMM, WEB, OPS, MOBILE

Interaction: ACCESS, CHI, GRAPH, CAS, DOC

Education: CSE, ITE, UCCS

Database: MOD, IR, KDD, SPATIAL

Performance: METRICS, HPC, ARCH, MICRO, PLAN

Applications: APP, SAM, Bioinformatics, SPATIAL, MOBILE, MM

Operations: MIS, UCCS

AI: ART, EVO, ecom

### Umbrella on SIG Page





#### **Broad Groupings of Special Interest Groups**

To facilitate understanding about the technical areas covered by the Special Interest Groups (SIGs), below are 11 broad areas and the SIGs most closely associated with each area. Click a SIG name to see the description or scroll down to see all SIGs.

Artificial Intelligence SIGART, SIGECOM, SIGEVO, SIGIR, SIGKDD, SIGWEB

Applications SIGAPP, SIGBio, SIGECOM, SIGHPC, SIGMM, SIGMOBILE, SIGSAM, SIGSPATIAL

Digital Content SIGBio, SIGIR, SIGKDD, SIGMETRICS, SIGMM, SIGMOD, SIGSAC, SIGSPATIAL, SIGWEB

Education SIGCAS, SIGCSE, SIGITE, SIGUCCS

Hardware Design SIGARCH, SIGBED, SIGDA, SIGMICRO, SIGMOBILE

Interaction SIGACCESS, SIGCAS, SIGCHI, SIGDOC, SIGGRAPH, SIGMM, SIGSAC Networking SIGCOMM, SIGMOBILE, SIGMETRICS, SIGMM, SIGOPS, SIGSAC, SIGWEB

Software SIGAda, SIGAPP, SIGBED, SIGDOC, SIGGRAPH, SIGMM, SIGOPS, SIGPLAN, SIGSAC, SIGSIM, SIGSOFT, SIGWEB

Ops and Management SIGMIS, SIGUCCS

Performance SIGARCH, SIGHPC, SIGMETRICS, SIGPLAN, SIGMICRO

Theory SIGACT, SIGecom, SIGSAM



### Auto news feeds for SIGs



- What: Regular news feeds tailored to each SIG
  - Automated story selection, a la Google News
  - But tailored for each SIG
- Goals: (1) Improve value of all SIGs.
  - (2) Avoid ongoing manual effort.
  - (3) Leverage common technology across SIGs.
- Wayne Graves leading implementation from ACM HQ



- New mobile processors come to the fore from Intel
- Renesas Mobile processor for LTE is touted for energy efficiency
- Vivante Shipping World's Smallest and Lowest Power OpenGL ES 3.0 IP Core

**Example:** Pilot for SIGMOBILE

# SIGSOFT Example





SIGN IN SIGN UP

#### SIGSOFT News Service

27-Sep-2013 01:16



Android 4.3 & Android 4.2 Jelly Bean Update Roundup Gotta Be Mobile

... Android 4.0 Ice Cream Sandwich as the company's mobile operating system. Since then, Google built on its Jelly Bean software by issuing incremental updates that weren't groundbreaking but were meant to improve an already fantastic operating system ...

and more »

26-Sep-2013 18:53

Hardware and software integration will intensify gulfnews.com

Smart TVs have fewer apps than tablets and smartphones and the reason cited by Reitz is that it is due to the fragmentation in the market and different custom operating systems and user interfaces on different TVs when compared to smartphones.

and more »

26-Sep-2013 18:17



What's Next for Big Data? 5 Techies Share Their Visions SiliconANGLE (blog)

Robert Morton, Senior Software Engineer at Tableau Software, states that the next step consists of two components which are data integration, and "big little data." Data Integration enables disparate data to be combined along their common facets while ...

26-Sep-2013 09:22

Next-Generation ERP Must Take a Giant Leap

Smart Data Collective

To be sure, more than any other piece of enterprise software, ERP systems are a challenge because of the complexities of business organizations. This isn't going to change. I've spent decades examining all sorts of businesses from multiple perspectives ...

and more »

News	Feed	Term

- Architecture and design
- Components, services, and middleware
- Configuration management and deployment
- Distributed, parallel and concurrent software
- Economics and metrics
- Embedded and real-time software
- Empirical studies of software engineering
- Find user software engineering
- Formal methods
- Knowledge-based software engineering
- Mobile, ubiquitous and pervasive software
- Model-driven software engineering
- Patterns and frameworks
- Policy and ethics
- Processes and workflows
- Program comprehension and visualization
- Requirements engineering
- Reverse engineering and maintenance
- Security, safety and reliability
- Software tools and development environments
- Specification and verification
- Testing and analysis
- ☑ User Interfaces
- ✓ Web software and cloud computing

Add Term:

News Constant: Software

refresh news

26-Sep-2013 05:24

### SIGCHI

Any of the following used with the word 'interface(s)' or 'interaction' (by no means an exhaustive list):

- Gamification
- Affordance
- Facebook
- Cultural probes
- Accessibility
- Assistive Technology
- Adaptive Technology
- Accessible Technology
- Augmentative Communication
- Screen reader
- Section 508
- Web Accessibility Initiative
- human computer interaction
- interaction design
- user experience design
- user interface design
- user centered design
- human centered design
- usability testing
- information architecture
- experience design
- social media
- design research
- ubiquitous computing
- mobile computing

- mobile human computer interaction
- pervasive computing
- human robot interaction
- child computer interaction
- game design
- · psychology of programming
- adaptive interfaces
- voice interaction
- table top interaction
- intelligent user interfaces
- interactive digital art
- augmented reality
- mobile augmented reality
- · affective computing
- qualitative and quantitative methods
- rapid prototyping
- user modeling
- user model
- design framework
- HCI4D
- persuasive computing
- ambient computing
- sustainable computing

- creativity and computing
- computers and aging
- computers and religion
- thanatology and computers
- intelligent buildings
- smart cities
- cross-cultural issues in HCI
- cognitive modeling
- information foraging
- participatory design
- contextual inquiry
- fashion
- web science
- data sciences
- design life cycle
- software engineering
- engineering interactive systems
- safety-critical systems
- development methods
- modeling interaction
- modeling interactive systems
- social computing
- programmable web
- linked data
- HCI and fun
- HCI and [anything]

- computer-human
- human-computer
- touch
- touchscreen
- gesture
- tactile
- haptic
- affective
- multimodal
- 3D
- menus
- toolkits
- specification
- tangible
- accessible
- brain-computer
- internationalization
- computer-brain
- mouse
- trackpad
- keyboard
- pen
- joystick
- game
- speech
- voice
- eye-tracking
- assistive
- tablet
- smartphone
- evaluation
- iterative design

### **Further Automation**

- Use keywords from last 2 years of SIG journal or conference submissions
  - E.g. papers in TOMCAPP Transactions.
  - Suggestion from Shih-Fu Chang, new chair of SIGMM.
  - Result from Wayne Graves: Setup system to periodically extract the keywords from the last 2 years of key SIG Transactions and conferences in the DL.



- Use the terms in the ACM CCS (<u>Computing Classification System</u>)
  - E.g. the terms in the ACM CCS for Networking.
  - Suggestion from Keshav Srinivasan, new chair of SIGCOMM.

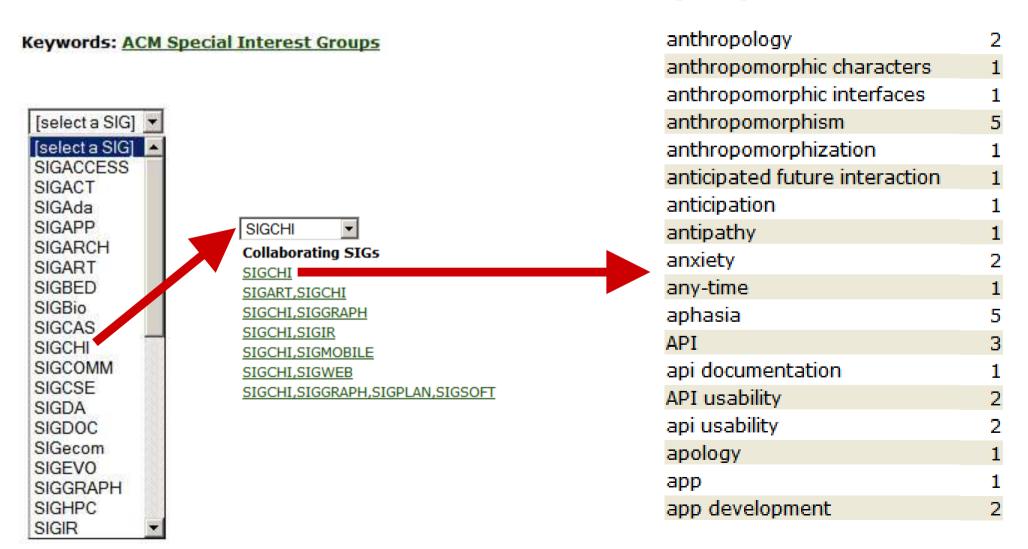


- Automation helps:
  - → Ongoing means of keeping the search terms topical.

# Auto Keywords



### http://dl.acm.org/sigkeywords.cfm



### **SIGCOMM**

- Network architectures
  - Network design principles
    - Layering
    - · Naming and addressing
  - Programming interfaces
- Network protocols
  - Network protocol design
  - Protocol correctness
    - · Protocol testing and verification
    - Formal specifications
  - Link-layer protocols
  - Network layer protocols
    - Routing protocols
    - Signaling protocols
  - Transport protocols
  - Session protocols
  - Presentation protocols
  - Application layer protocols
    - Peer-to-peer protocols
  - OAM protocols
    - Time synchronization protocols
    - Network policy
  - Cross-layer protocols
  - Network File System (NFS) protocol
- Network components
  - Intermediate nodes
    - Routers
    - · Bridges and switches
  - Physical links
    - Repeaters
  - Middle boxes / network appliances
  - End nodes
    - Network adapters
    - Network servers
  - Wireless access points, base stations and infrastructure
    - Cognitive radios
  - Logical nodes
    - · Network domains

### Network algorithms

- Data path algorithms
  - Packet classification
  - Deep packet inspection
  - Packet scheduling
- Control path algorithms
  - Network resources allocation
  - Network control algorithms
  - Traffic engineering algorithms
  - Network design and planning algorithms
- Network economics

#### • Network performance evaluation

- Network performance modeling
- Network simulations
- Network experimentation
- Network performance analysis
- Network measurement

### Network types

- Network on chip
- Home networks
- Storage area networks
- Data center networks
- Wired access networks
- Cyber-physical networks
  - Sensor networks
- Mobile networks
- Overlay and other logical network structures
  - Peer-to-peer networks
  - World Wide Web (network structure)
  - · Social media networks
  - Online social networks
- Wireless access networks
  - · Wireless local area networks
  - Wireless personal area networks
- Ad hoc networks
  - · Mobile ad hoc networks
- Public Internet
- Packet-switching networks

### From ACM CCS

- Network properties
  - Network security
    - Security protocols
    - Web protocol security
    - Mobile and wireless security
    - Denial-of-service attacks
    - Firewalls
  - Network range
    - Short-range networks
    - · Local area networks
    - Metropolitan area networks
    - Wide area networks
    - Very long-range networks
  - Network structure
    - · Topology analysis and generation
    - Physical topologies
    - · Logical / virtual topologies
    - Network topology types
      - Point-to-point networks
      - Bus networks
      - Star networks
      - Ring networks
        - » Token ring networks
        - » Fiber distributed data interface (FDDI)
      - Mesh networks
        - » Wireless mesh networks
      - Hybrid networks
  - Network dynamics
  - Network reliability
    - Error detection and error correction
  - Network mobility
  - Network manageability
  - Network privacy and anonymity
- Network services
  - Naming and addressing
  - Cloud computing
  - Location based services
  - Programmable networks
  - In-network processing
  - Network managementNetwork monitoring

### Two-Step Article Process

- The initial assumption was that all searches would focus on articles that are otherwise already confirmed to be computing oriented.
  - Example: Many SIGACCESS terms identified by the automatic system would result in lots of articles not focused on accessibility.
  - The terms only work because we know:
    - They are in the context of a SIGACCESS activity.
    - Therefore they are accessibility oriented.
- Use a two-pass process?
  - First pass identifies computing-oriented articles.
  - Second pass identifies subset focused on SIG-oriented issues.
  - Alternate: Small set of computing or SIG-related terms that must be present in addition to the "normal" set of search terms.

# **ACM Mobile Apps**

New – Mobile CACM apps – available now:

Android: bit.ly/18SeR5K

iPhone: <u>bit.ly/HWEAfw</u>

iPad: <u>bit.ly/MEa0JR</u>

Mobile Apps for DL coming soon.

# Survey Results: March 14 SGB Meeting

Survey for Today's SGB Meeting:

http://www.surveymonkey.com/s/SG7S3NC

# March SGB Meeting Agenda

9:00 am - 9:15 am	1.0 Welcome	nttp://www.acm.org/sigs/sgb/r	minutes/march-14-2013-sgb-meeting-agenda
	1.1 Welcome, Introductions (Altm	nan, Madden)	
	1.2 Welcome from ACM President	t (Cerf)	
9:15 am - 10:00 am	2.0 Report from the ACM CEO (W	/hite)	
10:00 am - 10:15 am	Break		
10:15 am - 10:45 am	3.0 Publications Board Report (Ko	onstan)	
10:45 am - 11:25 am	4.0 CSTA (Stephenson) Report		
11:25 am - 12:00 pm	5.0 IFIP (Turner) Report		
12:00 pm - 12:15 am	6.0 ACM History Committee Report (Tao Xie)		
12:15 pm - 1:00 pm	Lunch		
1:00 pm - 2:45 pm	7.0 Viability Reviews	3:00 pm - 3:15 pm	8.0 SGB EC Administrative Reports
	7.1 SIGDOC (Pierce) SI		8.1 SGB EC Update (Altman)
	7.2 SIGMICRO (Bose)		8.2 Distinguished Speakers Update (Bose)
	7.3 SIGMOD (Ioannidis		8.3 ACM/AMIA Task Force Report (Konstan)
	7.4 SIGMM (Nahrstedt)		8.4 SIG Proposals/New Conferences (Wood, Madden)
	7.5 SIGSAC (Bertino) §	3:15 pm - 4:00 pm	0.0 B + B + F + G + + (411)
	7.6 SIGSAM (Johnson)		9.0 Best Practices Session (All)  Canceled

7.7 SIGSIM (Fishwick)

### Overall Impression of SGB Meeting

What was your overall impression of the SGB Meeting?	Create Chart	Download
	Response	Response
	Percent	Count
Excellent	31.6%	6
Good	63.2%	12
Fair	5.3%	1
Роог	0.0%	0

Showing 3 text responses

Very informative

3/17/2013 6:42 PM View Responses

It was a great meeting.

3/15/2013 4:04 PM View Responses

The digital library cost deep dive was an excellent example of the transparency ACM needs.

3/15/2013 3:14 PM View Responses

# Favorite Part of Meeting

2. What was your favorite part of the meeting?	Create Chart	<b>♦</b> Download
	Response	Response
	Percent	Count
Welcome from the ACM President (Vinton Cerf)	20.0%	4
Report from the ACM CEO (John White)	40.0%	8
Publications Board Report (Joseph Konstan)	15.0%	3
CSTA (Chris Stephenson)	5.0%	1
IFIP (Joe Turner)	0.0%	0
ACM History Committee (Tao Xie)	0.0%	0
Viability Reviews	20.0%	4
SGB EC Update (Erik Altman)	0.0%	0
Distinguished Speakers Update (Pradip Bose)	0.0%	0
ACM/AMIA Task Force Report (Joseph Konstan)	0.0%	0
SIG Proposals/New Conferences (David Wood, Patrick Madden)	0.0%	0
Best Practices Session (SIGs and Steering Committees)	0.0%	0
Other	0.0%	0

### Favorite Part of Meeting

Showing 6 text responses

The discussion on open access publication must continue

3/17/2013 6:31 PM View Responses

Mr. Konstan is always amusing and fun. Makes even publications seem interesting.

3/17/2013 5:10 PM View Responses

This was one of the best CEO reports we've had in a long time; it was nice to get into real details. Only improvement would have been to get more information in advance.

3/16/2013 3:29 PM View Responses

The publishing info was important to take back to our SIG meetings

3/15/2013 6:05 PM View Responses

The reviews are the best part and the main reason for having these meeting, IMHO.

3/15/2013 4:04 PM View Responses

While the Welcome and CEO report were excellent, the viability reports gave good windows into the focus of peer leaders and SIG initiatives - these were instructive and of immediate value

3/15/2013 3:12 PM View Responses

# Least Favorite Part of Meeting

3. What was your least favorite part of the meeting?	Create Chart	Download
	Response Percent	Response Count
Welcome from the ACM President (Vinton Cerf)	5.0%	1
Report from the ACM CEO (John White)	0.0%	0
Publications Board Report (Joseph Konstan)	0.0%	0
CSTA (Chris Stephenson)	5.0%	1
IFIP (Joe Turner)	35.0%	7
ACM History Committee (Tao Xie)	0.0%	0
Viability Reviews	10.0%	2
SGB EC Update (Erik Altman)	0.0%	0
Distinguished Speakers Update (Pradip Bose)	10.0%	2
ACM/AMIA Task Force Report (Joseph Konstan)	0.0%	0
SIG Proposals/New Conferences (David Wood, Patrick Madden)	5.0%	1
Best Practices Session (SIGs and Steering Committees)	20.0%	4
Other	10.0%	2

### Least Favorite Part of Meeting

the ethics discussion was way out of line - and should have been tabled.

3/17/2013 10:11 PM View Responses

I always find the meetings informative, so I don't have a least favorite.

3/17/2013 6:42 PM View Responses

I just do not get what IFIP does and what it's purpose is. A "what is IFIP" session would have been better.

3/17/2013 5:10 PM View Responses

Really danced around the question of why bother. Was important to have an update, but would have liked a more substantive discussion rather than mostly dumping information.

Re: IFIP / Joe Turner

3/16/2013 3:29 PM View Responses

I was really sorry this was canceled. We need some interaction time

3/15/2013 5:28 PM View Responses

Re: Best Practices Session (SIGs and Steering Committees)

While the topic was great, it wasn't clear what we were supposed to do with this information on CSTA.

3/15/2013 4:04 PM View Responses

this is boring and pre-determined so why bother?

3/15/2013 3:14 PM View Responses

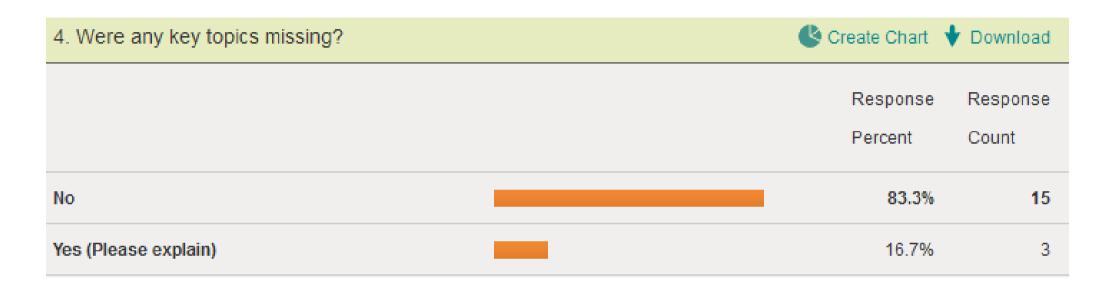
Re: Viability Reviews

Re: IFIP / Joe Turner

Too long and not directly tied to immediate and highest priorities - seemd to be an unclear opportunity based on the presentation

3/15/2013 3:12 PM View Responses

# Important Missing Topics



Best practices - what is Gold Open Access?

3/17/2013 10:11 PM View Responses

More information and discussion on the open access, and general publication issues to be advertised to the community 3/17/2013 8:46 PM View Responses

### Best practices

3/15/2013 5:28 PM View Responses

# Gold Open Access

5. What is closest to your view of Gold Open Access?	Create Chart	Create Chart 🕈 Download	
	Response	Response	
	Percent	Count	
Very Urgent and Important	31.6%	6	
Moderately important	36.8%	7	
Indifferent / No opinion	26.3%	5	
Moderately bad idea	5.3%	1	
Very bad idea	0.0%	0	

# Meeting Location

If we can get the same kind of airport hotel.

New York

3/18/2013 10:29 AM View Responses

since most of the SIG officers come from USA, and Chicago is financially feasible, it is the best location at this point 3/17/2013 8:46 PM View Responses

I am open to any of the above, or others.

3/17/2013 6:42 PM View Responses

Any big city that's easy to fly into and stay in. NY and Chicago are both good for me, though I prefer rotating to sticking with one. 3/17/2013 5:10 PM View Responses

I'm pretty flexible. Chicago is convenient, but I'd be happy to balance cheap (would Detroit, Minneapolis, etc. be cheaper and equally convenient) with ocassional important destinations (e.g., Beijing, Bangalore, Europe, Rio, ...)

3/16/2013 3:29 PM View Responses

might be combined by (at the previous or next day) small workshops / discussions / informtion meetings with ACM staff 3/15/2013 4:30 PM View Responses

### Other Comments - 1

The SIG Board meeting is too packed with presentations and there is not much time for discussions. Either the SIG Board meetings will be made 1.5 days (2 days) or we have less issues to present in one day and leave enough time for discussions

3/17/2013 8:46 PM View Responses

I don't care for Vint Cerf proselytizing about Google in these meetings. I was extremely unhappy about that, particularly hearing things about ethics from a man at a company that has just agreed that its employees had some serious ethical breaches. A bit of mea culpa might have been in order. (Yes, he's presumably not at fault himself, but still....) I think gold open access is a reasonable stop gap. It is not a solution. But it's a good placeholder. I'm not convinced the viability reviews are serving the purpose they're intended to serve. We don't really need to see most of them. It might be worthwhile rethinking that. Tradition is good, but sometimes it results in things that are stultifying.

3/17/2013 5:10 PM View Responses

I think we need to do some thinking about viability reports -- maybe just separating the "viability" issue from the SIG report. We could have viability recommendations in advance from the SGB EC, and those who have positive recommendations could be asked to instead spend 10 minutes reporting on 2-3 things they do that they're proud of and think other SIGs might try, plus 1-2 challenges they face where they could use advice.

3/16/2013 3:29 PM View Responses

### Other Comments – 2

### None.

3/15/2013 4:04 PM View Responses

I think the tension with these meetings is that I feel there are things the ACM needs to have the SIG chairs "bless" but they don't necessarily make for an interesting discussion.

3/15/2013 3:35 PM View Responses

Hook forward to reports on the publications and hybrid conf+Jounnal experiments next year.

3/15/2013 3:14 PM View Responses

### Thank you!

3/15/2013 3:12 PM View Responses

# The End



# Backup

