Minutes: SIAM Journal on Scientific Computing Editorial Board meeting, February 25, 2013, Boston

Attending: Editor-in-Chief Hans Petter Langtangen; Section Editors Jan Hesthaven, Tammy Kolda, Irad Yavneh; Associate Editors Mark Ainsworth, Weizhu Bao, Tim Davis, Hans De Sterck, Howard Elman, Eldad Haber, Michael Hintermüller, Misha Kilmer, Rolf Krause, Jing-Rebecca Li, Gunnar Martinson, Scott MacLachlan, Jim Nagy, Esmond Ng, Uli Rüde, Volker Schulz, Andreas Stathopoulos, Tim Tautges, Karsten Urban, Kees Vuik, Dan White, Christian Wieners, Karen Willcox, Carol Woodward, Dongbin Xiu; SIAM Publications Manager Mitch Chernoff, Senior Acquisitions Editor Elizabeth Greenspan, Publisher David Marshall.

- Editor-in-Chief Hans Petter Langtangen asks that everyone around the table state their name, location, and primary focus. Hans Petter notes that supplementary materials are new to SISC and it's a key item of discussion on the meeting agenda. He first turns the floor over to Mitch Chernoff, who presents highlights from the report on the state of the journal. (See the slides attached.) Included:
- -- SISC is one of SIAM's largest journals. The 529 submissions in 2012 represent an all-time high. The rate has seen a steady climb in a relatively short period. As recently as 2009 close to 200 fewer papers were submitted.
- -- Submissions by section: 2011 and 2012 are the first full years since the journal restructured and classified papers into three categories. Classic SISC represented by Methods & Algorithms for Scientific Computing saw almost 300 submissions each year. Computational Methods in Science & Engineering climbed from 115 papers in 2011 to 152 last year. Software & High-Performance Computing is growing: 33 papers in 2011, 46 submissions 2012, 14 in less than 2 months to start 2013.
- -- Though acceptance and rejection rates vary from year to year, SISC shows overall consistency. We see more than 1 in 2 submissions rejected in each of the past few years (51, 52, and 58 percent respectively, from 2009 to 2011. Some 49 percent of 2012 submissions have been rejected with 34 percent still in process. The acceptance rates are 1 in 3 papers for 2009 and 2010 submissions, and a bit above 1 in 4 for papers arriving in 2011 with another 4 percent still in review or revision.
- -- The three sections, too, were consistent in their acceptance/rejection rates for 2012 submissions, close to the journal's overall percentages.
- -- With acceptance rates steady but submissions high, it's no surprise that a record high of almost 4300 pages published was seen in 2012's Volume 34.
- -- Pages published by section 2012: Classic SISC, 3096 pages. CSE, 923 pages. Software & HPC, 272 pages.

- -- Time from submission to acceptance, much discussed in the past year as a result of SIAM Past President Nick Trefethen's initiative to bring the number of months down, shows a 5-year median of 10.3 months for SISC. This is more than a half month faster than SIAM's overall 10.9 months median time.
- -- Production time at SIAM is a fast 3 months from acceptance and 2.7 months from receipt of the author's TeX source. The work remains of high quality and the time includes formatting, copy editing, corrections, proofreading, galleys for the author's review, followed by checks and final corrections.
- -- SIAM has checked every submission for duplication for almost three years. In this time, 2 percent of the 1409 papers submitted to SISC have raised a concern. This does not necessarily mean that plagiarism is found, but there's sufficient duplication of previously published content to raise a flag. SIAM staff pre-screens the CrossCheck report for each submission, and alerts Hans Petter if there's a particular concern. It is the responsibility of the EIC to make the determination if there's a legitimate reason for the duplication or whether the paper should be rejected on this basis.

SISC's low rate is similar to SIAM journals overall, where 3 percent or 390 of 12,075 submissions have been flagged for further EIC review of the report comparing the paper to previously published work.

SIAM also continues to run a new report at acceptance. Though the rate of flagged papers at acceptance is very low (0.5 percent overall), one SISC paper was halted last year due to duplicated material that appeared in the CrossCheck report. In the end, the author was asked to revise the paper to cite the other work and reduce the material recycled. Some six months later, after the revision was completed and reviewed, the paper was returned to accepted status.

- Hans Petter emphasizes early rejection when appropriate. It provides fairness to authors, who would prefer a fast decision as opposed to rejection after revision. It also helps in the effort to speed overall review times. He notes that outright rejection of papers that are not a fit to the journal is an option taken both by himself and the Section Editors. He reminds the Associate Editors that it is their option, too, for papers where they see no point in seeking referee reports.
 - The Section Editors are asked to speak of progress:
- -- Jan Hesthaven says that the classic SISC section Methods & Algorithms for Scientific Computing is "doing very well." The section sees a good volume of submissions and papers move forward at a good pace, he notes.
- -- Irad Yavneh says of Computational Methods in Science & Engineering that there's "an opportunity, a risk, and a cost." He explains that the opportunity is to widen the scope of high-quality papers. To underline this point, he adds that CSE is a "huge meeting." The risk is that the section sees some papers submitted to topical journals that were rejected, and are now submitted

to SISC. The cost is that the editors must handle a percentage of papers "not at the center of our interests and expertise." There's a related need to find referees who are not colleagues.

In the end, however, Irad says is the opportunity to "make a great journal even better."

-- Tammy Kolda says that Software & High-Performance Computing is seeing "really good papers." As a result, she is not as concerned about the number of submissions. She points out these tend to be difficult papers to write. She urges the board to "keep reminding folks . . . keep recruiting."

She adds, "I'm very happy with the submissions we've been getting, we just have to get more."

Tammy says that papers submitted to Software & HPC should have some novelty. Jing-Rebecca Li asks about papers where the novelty is to an application field. Tammy says that's more likely for CSE consideration, not HPC. Hans Petter mentions the change in Editorial Policy that added parallel algorithms to HPC.

- Howard Elman asks about SIAM journals' overlap. He inquires about discussions relating to the new SIAM/ASA Journal on Uncertainty Quantification. Hans Petter says that the scope of the UQ journal was discussed with the journal Editors-in-Chief. A UQ journal does impact journals including SISC, SINUM, and MMS that were receiving work in this area.
- SISC is among the first group of SIAM journals to encourage authors to submit Supplementary Materials for unrefereed consideration at the same time they submit the manuscript itself. SISC began this just one month ago. Hans Petter recaps that the materials can include but are not limited to multimedia, computer code, data, animations, and tables. Virtual Machines are too large to be included as Supplementary Materials but authors can submit a link to point to VMs available from other sites or on cloud computing platforms if they wish to indicate an environment on which their code runs.

Hans Petter emphasizes that the supplementary materials are not refereed. These materials may aid in reducing paper length.

There is a discussion of whether SISC can also have refereed supplementary materials, especially when multimedia files are involved. Rolf Krause says that by design, the journal should not referee supplemental materials. Hans De Sterck says that authors should not write papers in such a way that supplemental materials are essential. Mark Ainsworth states he is reluctant to impose an additional burden on referees.

Jan says, "The paper has to be able to stand on its own." Tim Tautges agrees, saying some readers will not have supplemental materials access, so the paper must stand on its own.

There is also discussion of treatment of supplementary materials in the print version of SISC. Irad suggests that use of a bar or QR code in print may provide direct access. Otherwise, the hard-copy journal would be limited to printing the material's URL.

Kees Vuik reminds everyone to be careful with software licenses and make sure to have the right ones at submission. David Marshall adds that a help to editors is the fact that authors must include an index listing their supplementary materials content along with justification of why it's there.

Karen Willcox asks how the materials will appear to her as a paper's review editor. Mitch replies that authors see on the submission form:

Are you submitting supplementary materials?

If you answer yes, note that a separate index file listing is required for supplementary materials, briefly describing file contents along with the reason the materials are included.

Template index files are available for your use <u>here</u> and <u>here</u>. See <u>http://www.siam.org/journals/sisc/supplementary.php</u> for full guidelines on the submission of supplementary materials.

If the author answers yes, it's visible to the editor. In addition, the index file and the supplementary materials files appear in the same location as the manuscript file.

Members of the board may want to read http://www.siam.org/journals/sisc/supplementary.php, to get acquainted with the guidelines.

- Hans Petter points to a web page he assembled for easy navigation to reference material. Found at http://goo.gl/fEuFl, it is headlined Resources for SISC Editors. It includes links to the SISC section of www.siam.org, the Associate Editor FAQ and instructions, journal Editorial Policy, the supplementary materials instructions page, and notes on speeding the review process, policies, and procedures.
- With sessions about to resume, Hans Petter thanks everyone for their efforts and adjourns the meeting.