

Practices of PLDI

Hans Boehm, Jack Davidson, Kathleen Fisher, Cormac Flanagan, Jeremy Gibbons, Mary Hall, Graham Hutton, David Padua, Frank Tip, Jan Vitek, Philip Wadler

Goal

Our goal is create a contract between PLDI organizers and the broader PLDI community that defines essential organizational and reviewing policies. We wish to establish clear expectations for authors while allowing plenty of leeway for organizers to innovate. We anticipate that the contract will change over time, but when it does, we'll inform the community and provide a justification for the change.

The remainder of this document is organized topically. Each topic has two subsections:

Prescriptions and *Suggestions*. *Prescriptions* are firm policies; we expect that the organizers for each incarnation of PLDI will adhere to the policies. In cases where the organizers feel an exception or change is warranted, they must first consult with the SC. *Suggestions* are best practices that we expect organizers to strongly consider.

Definitions

CFP: Call for papers

COI: Conflict of interest

DBR: Double-blind reviewing

EC: SIGPLAN Executive Committee

OC: PLDI Organizing Committee

PC: PLDI Program Committee

SC: PLDI Steering Committee

SIGPLAN: ACM Special Interest Group on Programming Languages

Topics

Conference Organization

SC Composition

Prescriptions

The PLDI steering committee for the period from PLDI X to PLDI $X+1$ consists of:

- The current and past two SIGPLAN chairs
- The current and past SIGPLAN vice-chairs
- The General and PC chairs for PLDI $X-2$, $X-1$, and X
- The outgoing Chair of the Steering Committee, for one year past the end of his or her term as Chair.

In addition to the above formal members, the General and PC chairs for PLDI $X+1$ are typically invited to participate in most SC discussions. The Chair of the Steering Committee is elected by the Steering Committee from among the members of the committee to serve a two-year term. The outgoing chair serves an additional year on the committee past his or her term as chair to provide institutional memory. The constitution of the steering committee changes every year on July 1, with the PLDI chairs changing every year and the SIGPLAN chairs/vice chairs changing every third year.

Selection of Organizing Committee

Prescriptions

The General and PC chairs for year $X+2$ are selected by the SC for year X to $X+1$, subject to the approval of the EC. The General and PC chairs select other members of the OC.

Suggestions

PLDI's OC members (Treasurer, Publicity, Student Events, Co-located Events) are encouraged to hold three year terms to provide continuity, and can choose their own successors, in consultation

with the SC. The General and PC chairs may at their discretion appoint other members of the OC.

Conference Venue

Prescriptions

The conference venue is chosen by the General Chair, in consultation with the SC. In general, we will strive to identify venues that reflect the diversity of the PLDI community.

Suggestions

In recent years, PLDI has rotated between the East Coast of North America, the West Coast of North America (in both cases, we interpret “coast” broadly), and Europe. The recent instance of PLDI in China went very well and PLDI may well rotate to other locations in Asia in the future.

Some flexibility in location choice is desirable, since we may not get the most attractive hotel bid in our ideal city. Hotel choices are increasingly limited by the size of the conference and the amount of meeting space required for co-located events.

Program Committee Composition

Prescriptions

The PC is selected by the PC chair in consultation with the general chair and the PLDI SC. The composition of the PC is subject to approval by the EC Chair and Vice-chair.

Topical, personal, and institutional diversity is critical to the long term vitality of PLDI. In general, PLDI adheres to the [SIGPLAN Diversity Policy](#). Some particulars:

- The group consisting of the PC plus the General and PC chairs should have no more than 10% of its members from any single institution¹, except in cases where the PC chair makes a compelling case to the SC and EC that there is a reason to deviate (e.g., to ensure an adequate coverage of expertise). The definition of “institution” for multi-department or multi-site entities has been the topic of much debate, and it seems that no satisfactory simple definition is possible. When in doubt, we will use the broadest reasonable definition for which conflicts can reasonably be said to exist. For example, we consider Microsoft Research Redmond and Microsoft Research Bangalore to be part of the same institution because publishing success at the former boosts the reputation of the latter, and vice versa.
- PC members should not serve on the PC more often than every four years. An exception may

¹ Currently, the SIGPLAN policy is no more than two members from the same institution; however, the EC is contemplating a change that would allow the number to be relative (to PC size), rather than fixed.

be made to enable a small overlap (<10%) from year to year to provide continuity. No one should serve on the PC for more than two years in a row.

- The PC should aim to achieve a roughly uniform distribution of seniority (from junior to senior).
- The PC chair should strive to avoid the appearance of favoring current and former students, postdocs, colleagues, or collaborators for membership on the PC or ERC (if any).
- The size of the PC should be such that, given the expected number of submissions (currently, around 250), each PC member will review 18-25 papers. Exceeding the upper bound is strongly discouraged.
- The same diversity criteria listed above should apply to the ERC, scaled to the size of the ERC.

Suggestions

- The PC chair of year X+1 can be invited to serve on the PC (with possibly a lighter reviewing load) for year X as soon as he or she is selected.
- The PC chair should strive to avoid selecting PC members that collaborate regularly with each other or with the PC chair, or PC members from the same institution in the exact same area.
- PC Chairs are encouraged to include on the PC deserving young researchers who have not yet had the opportunity to serve on the PLDI program committee. Frank Tip developed a tool (pc-miner) to help PC chairs identify such researchers. The tool has subsequently been used by a number of other program chairs. More information is available from the website: <https://cs.uwaterloo.ca/~ftip/pcminer.html>.

Timeline

Suggestions

- June, X-24 months: General chair selection
- October, X-20 months: PC chair selection
- January, X-17 months: Submit candidate PC (and ERC, if any) to SIGPLAN VC and PLDI SC
- March, X-15 months: Finalize PC
- June, X-12 months: Publish PC and CFP
- November, X-7 months: Submission deadline
- January, X-5 months: Author Response Period
- January, X-5 months: Author notification
- March, X-3 months: Camera ready deadline

Review Process

Author Anonymity

Prescriptions

PLDI will commit to use of a lightweight double-blind reviewing, starting in PLDI '14. The data from Mike Hicks' [report from POPL '12](#) suggests that there is support in the broadly construed programming language community for DBR. The primary goal of light DBR is to *help PC members review papers with minimal bias, not to make it hard for them to discover authorship if they try*. The process should be such that authors are able to withhold their identity, and reviewers are able to avoid learning their identity. "Lightweight" means at least the following:

1. Paper submissions should not have the author names listed and references to previous work should be in the third person.
2. Apart from the above, authors are not required to "hide" their submissions: they can put them on web pages and give talks about them.
3. Authorship will be revealed to the reviewing PC member after he/she has submitted a review (which they can subsequently update).

Given the use of DBR, the PC chair must vet any external reviewers suggested by a PC member who has not yet reviewed the paper.

Suggestions

Provision (2) above is intended to prevent DBR from inhibiting normal dissemination of scientific ideas. Authors should not, however, take it as a license to explicitly lobby the PC or likely reviewers on behalf of their work; doing so would be contrary to the intent of DBR. While we will not attempt to codify or police such behavior, PC chairs may wish to remind authors of their obligation to live up to the spirit as well as the letter of light DBR.

Conflicts of Interest

Prescriptions

Authors and PC members must adhere to SIGPLAN's [conflict of interest policy](#).

Suggestions

Conflicts of interest can be tricky to manage in the presence of DBR. PC chairs may find the

following conflict of interest policy, adapted from Michael Hicks' [POPL '12 DBR FAQ](#), useful.

Using DBR does not change the principle that reviewers should not review papers with which they have a conflict of interest, even if they do not immediately know who the authors are. Quoting (with slight alteration) from the [ACM SIGPLAN review policies document](#):

A conflict of interest is defined as a situation in which the reviewer can be viewed as being able to benefit personally in the process of reviewing a paper. For example, if a reviewer is considering a paper written by a member of his own group, a current student, his advisor, or a group that he is seen as being in close competition with, then the outcome of the review process can have direct benefit to the reviewer's own status. Conflicts of interest may also exist between family members, or if people have a non-trivial financial interest in each other's work. If a conflict of interest exists, the potential reviewer should decline to review the paper.

In previous years, PLDI relied on authors to indicate whether they had conflicts of interest with PC/ERC members. However, experience has shown that this practice is prone to abuse and that author-supplied conflict information cannot be relied upon (at PLDI'12, both authors and PC/ERC members were asked to declare conflicts--the former by explicitly listing PC/ERC members, the latter by supplying a list of recent collaborators in free-form text format. When the PLDI 2012 PC chair reconciled these lists manually, more than 30 cases were uncovered where conflicts declared by authors were spurious. While it could be that some of these conflicts were due to an accidental oversight, it is possible that some authors declared conflicts with PC/ERC members because they didn't want them to review their paper, possibly because they had a reputation as being harsh or sceptical reviewers. Previous PLDI program chairs also reported incidents of this practice, which is sometimes referred to as "blackballing").

As a result, it is our recommendation that PC chairs do not rely on authors to declare conflicts, but instead to rely only on PC/ERC members to declare conflicts of interest with people and institutions. While this potentially provides PC members some clues about author identity, this can be mitigated by augmenting the list of authors with the names of authors of papers at previous instances of PLDI when conflicts are declared. This practice was successfully adopted at PLDI 2013.

The PC chair may find it useful to identify another PC member to handle papers for which the chair is in conflict. In the past, the General Chair has sometimes played this role.

Expert and External Reviews

PLDI is committed to identifying expert reviewers for every submission, insofar as possible. By "expert", we mean a reviewer who is very well versed and current in related work in the field. Authors gain confidence in the outcome of review decisions when expert reviewers are involved. That said, we believe that well-informed, but non-expert reviews also play a significant role in acceptance decisions: they represent the majority of the future readership of a paper, and involving them mitigates against topical balkanization.

Prescriptions

The PC chair should strive to identify at least two (PC or external) expert reviewers for each paper that the PC chair deems to be a serious contender for acceptance, but reserve the right not to do so in rare cases where a sufficient number of willing external reviewers can't be identified. The chair should also strive to identify at least one (PC or external) informed non-expert reviewer.

External reviewers will be encouraged to participate in online discussion of the papers they've been assigned; however, they should not see unrelated online PC discussions.

The PC chair designates and announces an External Review Committee (ERC) in the CFP.

Suggestions

The PC chair may encourage (or even require) PC members to identify candidate external reviewers for each paper they bid on.

The PC chair should exercise some judgment in assessing expertise ratings. Some PC members consider themselves experts on most topics, while other, more modest, PC members almost never declare themselves an expert. In the end, the PC chair should use his/her judgment in deciding whether the expertise on a given paper is sufficient.

Submission of Supplementary Material

Prescriptions

Authors will be allowed to submit supplementary material (proofs, software, datasets, etc.) at the time of submission. The PC is allowed, but not required, to consult this material.

The PC chair must allow two forms of supplementary material to be submitted: anonymized material, which may be made available to reviewers along with the submission, and non-anonymized material, which may only be made available to reviewers after they have submitted their initial reviews. Both are useful in different circumstances: the former is appropriate for materials (e.g. proofs, technical appendices) that are easy to anonymize and may aid expert reviewers in assessing the technical correctness of a paper, whereas the latter is appropriate for materials (e.g. software, datasets) that are difficult to anonymize.

Evaluation Criteria and Acceptance Ratio

Prescriptions

We strive to accept all high-quality submissions. There is no numerical limit on the number of acceptable papers.

Suggestions

- The PC should focus its deliberations on:
 - whether there is a genuine research contribution which may include a new insightful evaluation of previous work
 - whether the approach is fundamentally sound
 - whether the community will benefit from reading the paper
 - whether the paper (and supporting material, if any) contain sufficient information for others to reproduce and build on the results
- The committee should lean toward accepting papers that are controversial, that is, ones that, after discussion, still have both a strong advocate and a strong detractor.
- The committee should lean toward accepting papers that explicate their results clearly.

PC Submissions

PC submissions can be problematic to manage, but we believe that on balance, the benefits of allowing PC submissions exceed the costs.

Prescriptions

PLDI will allow PC submissions, but disallow submissions by the General and PC chairs.

PC members will not be allowed to review or discuss other PC papers; hence *all* reviews of PC

submissions must be external. The PC chair will designate the roster of external reviewers for PC papers, manage the review process, and make the final acceptance decision, in consultation with the reviewers. In cases where the PC chair has a conflict with the author, the chair must designate a non-conflicted senior PC member to manage the review process and make the final acceptance determination.

SIGPLAN requires that PC papers be held to a [higher standard](#) than other papers. For PLDI, the criterion for acceptability of a PC paper is *clear accept*. We will not prescribe a specific floor on review scores, since such numbers tend to be poorly calibrated. However, the PC chair must ultimately be able to convince the SC and EC that those PC papers that were accepted were comfortably within the envelope of accepted, non-PC papers.

Acceptance decisions for PC papers will be announced at the same time as other author decisions are announced; i.e., the PC will not be aware of any PC paper decisions until the PC meeting is complete.

The policy on PC submission must be clearly explained to candidate PC members when their participation on the PC is solicited.

Author Response

Prescriptions

PLDI will allow author review responses. Authors will be allowed to read all reviews that are available at the time of the author response period. The PC and the PC Chair will make every effort to complete *all* initial reviews before the author-response period. Late initial reviews are unacceptable. Additional reviews may be solicited after the author response period and it may not be possible for the authors to see these reviews before final decisions are made by the PC. Authors must be allowed at least four days to respond.

Suggestions

- Many authors like seeing the scores on the reviews at author response time, so consider making the scores available as well as the reviews.
- Authors should be strongly encouraged to be brief.
- PC chairs may choose to state that the PC is not obliged to read or respond to rebuttals beyond a certain designated length.
- The PC chair may choose to allow authors to provide feedback on review quality, e.g., via a simple rating scale, in addition to rebutting the content of the review.

Distinguished Papers

Prescription

Up to 10% of the accepted papers may be designated for ACM SIGPLAN Distinguished Paper Awards.

Suggestions

- Nominations may be solicited from the PC and ERC, and will also include the top 10% papers in terms of numeric scores. PC/ERC members should not nominate papers by authors they are conflicted with.
- PC papers may also be nominated.
- The PC and ERC (excluding the authors of any nominated papers) will vote on this set of nominated papers. Each PC member may cast as many votes as the target number of Distinguished Papers. The usual conflict-of-interest rules will apply (e.g., PC/ERC members cannot vote on papers with which they have a conflict of interest).
- PC and ERC members may optionally include additional comments with their votes such as “paper X is much stronger than paper Y”, or “paper Z should not receive an award because of ...”.
- The program chair and general chair decide which papers will receive the award. While the number of votes received by nominated papers is an important factor, the program chair and general chair may exercise their judgment in making their decision.

PC Member Responsibilities

Prescriptions

PC members must commit to reading all of their assigned papers and writing their own reviews. PC members may also suggest additional reviewers, but they should not subcontract reading or review writing duties to others. The PC chair must always be consulted before additional reviewers are contacted to avoid conflicts and to ensure topical balance. PC members may share and discuss papers with their students and post-docs (subject to the usual confidentiality and COI provisions), and incorporate information from such discussions into their review, but the PC member is still responsible for writing the review. When a student is involved in this capacity, the PC chair should be informed so that the student receives appropriate credit.

In the interest of fairness to authors, PC members must also commit to attending the in-person PC meeting in-person. An individual who cannot commit to attending the meeting in person should

decline the invitation.

PC members should be directed to the [SIGPLAN Republication Policy](#). If a related version of the paper appeared in a workshop, take into account whether its call for papers stated that publication in the workshop is not intended to preclude later publication.

Suggestions

PC Chairs should ask the discussion leader at the PC meeting to update his/her review with a few sentences that reflect the discussions at the PC meeting, particularly for papers that are not accepted.

PC Management

Prescriptions

PLDI will continue to have an in-person PC meeting. PC members will be allowed to participate in the discussion (both online and in-person) of papers that they didn't review, and with which they have no conflicts.

The PC meeting should be preceded by an extensive online discussion period. The online discussion period should be a minimum of one week, but two (or more) is strongly preferred. During the discussion period, the PC will be allowed to see all papers for which they have no conflicts, and participate in the discussion. Online discussion must be actively facilitated by the PC chair, and (if used) per-paper "guardians" (see above).

The PC chair will strive to ensure, prior to the PC meeting, that every *competitive* paper has at least

- three PC reviews
- at least one, and preferably two expert reviews

The PC chair will designate a "COI-PC Chair" who will handle the PC chair is conflicted with.

PC papers will be handled entirely by the ERC and resolved before the PC meeting. Decisions on PC papers will be announced at the end of the PC meeting.

Suggestions

- Nierstrasz's Identify the Champion (ABCD/XYZ) scoring process has stood the test of time, and we strongly encourage PC chairs to use it. However, the chair should feel free to add

other reviewing criteria, with the goal of streamlining the discussion process and better calibrating reviewer baselines.

- PC members should be strongly encouraged to submit reviews as they are completed; this makes it easier for the PC chair to monitor progress and identify problems (e.g., the need for additional reviewers) early.
- The PC chair may wish to identify major reviewer disagreements and papers without sufficient expertise prior to the PC meeting and seek second opinions where necessary to help resolve the disagreements.
- Papers that are clearly below the bar for acceptability may be identified during the online discussion period and excluded from discussion at the PC meeting.
- Experience has shown that a two day PC meeting provides adequate time for deliberation while avoiding PC burnout.
- Instead of considering the papers in order from highest-ranked to lowest, consider the papers in a quasi-random order (see article by Kathleen Fisher in SIGPLAN Notices, 46(4):17, April 2011).
- If the most positive reviewer for a paper is external, the chair may wish to ensure that the paper is discussed on day one of the PC meeting and the outcome summarized by the PC chair so that the external reviewer can provide additional feedback prior to a final decision.
- The PC chair is encouraged to use a multi-round discussion process for papers where an initial consensus is not apparent.
- Reviewers are encouraged to use a proxy when visiting the author's web site, to preserve their own anonymity.
- We recommend that the PC chair allow all reviewers (PC *or* external) to see decisions for the papers they have reviewed before decisions are publicly announced.
- The General Chair may play the role of “COI-PC Chair”.

One-minute madness

Prescriptions

The SC has committed PLDI to an experiment for the next three years (2014--2016). Each day of the conference, the first session of the day should be a plenary, typically including an invited talk, and also including "one-minute madness", sixty-second summaries from each speaker scheduled for that

day. The goal is to help attendees decide which session to attend, and to provide a view of PLDI that can be attended by all in spite of parallel sessions. Attention will be required to ensure smooth progression of speakers, including pre-loading all slides on a single machine; organisers may wish to schedule a rehearsal. We expect that over the course of the three years, speakers will develop skill at producing effective one-minute summaries of their talks.

Recommendations

You may wish to use three student volunteers: one running the laptop, one as compere on-stage with the stopwatch, one off-stage marshalling the queue.