

Practices of PLDI

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Goal

Our goal is to create a contract between the conference organizers and the broader 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 the conference 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: Organizing Committee

PC: Program Committee

SC: Steering Committee

PCC: Program Committee Chair

GC: General Chair

SIGPLAN: ACM Special Interest Group on Programming Languages

SIGPLAN VC: SIGPLAN Executive Committee Vice Chair

Topics

Managing Change

This topic addresses the meta-policy of how the SC manages changes in policy.

Communication

Prescriptions

Pending changes should be clearly communicated to the community in advance. All changes in policy should be canvassed at the open meeting at the previous conference (i.e., five months before the submission deadline).

Surveys

Suggestions

Surveys of authors, reviewers, and attendees are a good mechanism for gathering community feedback. Careful alignment of survey questions from year to year and with those from other SIGPLAN conferences may allow meaningful comparisons to be drawn longitudinally and among the conferences.

Conference Organization

Steering Committee Composition

Prescriptions

The SC for the period from year X to year $X+1$ consists of:

- The current, past, and past-past SIGPLAN chairs
- The current and past SIGPLAN vice-chair
- The GC and PCC for year $X-2$, $X-1$, and X , with those for year $X+1$ as non-voting observers.
- The outgoing Chair of the SC, for one year past the end of his or her term as Chair.

In addition to the above formal members, the GC and PCC for year $X+1$ are typically invited to participate in most SC discussions. The SC Chair is elected by the SC from among the members of the committee to serve a three-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 SC changes every year on July 1.

Selection of Organizing Committee

Prescriptions

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

Suggestions

OC members (Industrial sponsorship, 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 GC may appoint other members of the OC.

Conference Venue

Prescriptions

The conference venue is chosen by the GC, in consultation with the SC. We strive to identify venues that reflect the diversity of the community.

Suggestions

In recent years, PLDI has rotated between the East Coast of North America, the West Coast of North America, and Europe. The instance of PLDI in China went well and the conference may 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.

Program Committee Composition

Prescriptions

The PC is selected by the PCC in consultation with the GC and the SC. The composition of the PC is subject to approval by the SIGPLAN VC.

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

- The group consisting of the PC plus the GC and PCC should have no more than 10% of its members from any single institution, except in cases where the PCC 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" has been the topic of much debate. When in doubt, use the broadest definition for which conflicts can reasonably be said to exist (e.g., Microsoft Research Redmond and Microsoft Research Bangalore are said to be the same institution because publishing success at the former boosts the reputation of the latter).
- PC members should not serve on the PC more often than every four years. A small overlap (15%) from year to year may serve to provide continuity. However, 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 PCC should strive to avoid the appearance of favoring current and former students, postdocs, colleagues, or collaborators for membership on the PC or ERC.
- The size of the PC should be such that, given the expected number of submissions, each PC member will review around 20 papers.
- The same diversity criteria listed above should apply to the ERC, scaled to the size of the ERC.

The above notwithstanding, PCC are reminded that the most important criterion in selecting the PC members is that they will exercise good judgment across the range of submitted papers.

Suggestions

- The PCC and GC of year X+1 should be invited to serve on the PC (with a lighter reviewing load) or act as observers for year X as soon as they are selected.
- The PCC should strive to avoid selecting PC members that collaborate regularly with each other or with the PCC, or PC members from the same institution in the exact same area.
- PC Chairs are encouraged to include young researchers who have not yet had the opportunity to serve on a PC. The PC-Miner tool has been used to identify such researchers:
<http://www.franktip.org/pcminer.html>.
- PC Chairs are encouraged to consider the *submission* profile of previous years when assessing the coverage and diversity of their committees. Focusing only on the *accepted* publication profile of previous years may skew the PC

Timeline

Prescriptions

Deadlines should be advertised as a week day anywhere on earth (AOE).

Suggestions

- June, X-24 months: GC selection
- October, X-20 months: PCC selection
- January, X-17 months: Submit candidate PC and ERC 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
- December, X-6 months: Phase 1 Author Response Period
- December, X-6 months: Phase 1 Author notification
- January, X-5 months: Author Response Period
- January, X-5 months: Author notification
- March, X-3 months: Camera ready deadline

In the past it has been customary to identify an *abstract deadline* one week ahead of the paper deadline.

The abstract deadline has been deprecated as it does not assist authors or PCC.

The PC chair is encouraged to synchronize, to the extent it is possible, submission and notification deadlines with related conferences (e.g., ASPLOS). Late submissions and requests for changes are typically denied; exceptions can be made in special cases in consultation with the SC Chair.

Paper Format Requirements

Paper Format and Length

Prescription

Papers should follow the standard two-column ACM proceedings style in 10-point font and be at most 11 pages, *exclusive* of the bibliography. The bibliography is excluded from the page count to encourage good citation practices and discourage illegible bibliographies. Citations can be either in numeric style or author-year style. Numeric citations always stand as a parenthetical note (e.g., “[42]”), while author-year citations may stand either as a noun phrase (e.g., “Church (1935)”), or as a parenthetical note (e.g., “(Church, 1935)”).

Suggestion

The PCC can make use of the format checker, *banal*, that comes with HotCRP to check for formatting compliance. This tool also allows authors to check compliance before the deadline.

Review Process

Assignment of Reviews

Suggestions

- The bidding process should ensure that *preference* and *expertise* are not conflated; when they are, some of the most expert reviewers are likely to be missed.
- PC Chairs are encouraged to enlist the help of a small number of trusted people with expertise across SIGPLAN during the review assignment process. Suitable people may include the GC, past PCCs of related conferences, or experts within major sub-fields.
- Suggestions for reviewers should be solicited from each paper’s guardian.

Author Anonymity

Prescriptions

PLDI is committed to the use of double-blind reviewing. The primary goal of DBR is to *help PC members review papers with minimal bias* and should not impede normal academic communication. The process should be such that authors are able to withhold their identity, and reviewers are able to avoid learning their identity:

1. Submissions should not have author names, and references to previous work must be in the third person.
2. Authors are not required to “hide” their submissions: they can put them on web pages and give talks about them without creating a conflict for potential reviewers.
3. Reviewers should notify the PCC if anonymity is an obstacle to sound and objective reviewing of a paper. The PCC may reveal author names in such cases.

Given the use of DBR, the PCC must vet any external reviewers suggested by a PC member.

Author identities will be revealed at the conclusion of the online discussion period, immediately prior to the PC meeting.

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. 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 DBR.

Reviewer Anonymity

Prescription

Reviews should not be signed without the approval of the program chair..

Guardians

A guardian is a PC member assigned the responsibility for ensuring that a paper is carefully and fairly assessed. Concretely, a guardian's role may include:

- Assisting the PCC in identifying gaps in reviewer expertise.
- Ensuring that all reviews are of an appropriate standard.
- Facilitating online discussions.
- Writing the author-visible summary of the decision rationale.

Suggestions

- The PCC assigns a guardian to each submission, and each PC member should be assigned roughly the same number of papers.
- Prospective PC members should be informed of the duties of PC members as guardians, as well as their duties as reviewers, at the time that they are invited to the PC.

Two-Phase Reviewing

A *two-phase review process* is necessary to address the goals of the review process as the number of submission grows. Given a cap on PC review assignment (much more than 20 is undesirable) and practical limits of scaling the face-to-face PC meeting, the number of PC reviews is limited. A two-phase review process identifies weak papers early and distributes reviewing workload toward those submissions that are most viable. The result of the first phase is that some papers will be relegated, i.e., set aside without extra reviews. Relegated papers may be revisited at the PC meeting at the discretion of the PC chair. In the interests of transparency and timely publication of research, authors of relegated papers should be notified at the time they are relegated. In the interests of accountability and fairness, authors of relegated papers should have the opportunity of writing a response to reviews received prior to the relegation decision. Authors will be given the opportunity to withdraw a relegated paper, giving them the opportunity to submit the work elsewhere.

Prescriptions

- Two-phase reviewing is used. The first phase will relegate the least viable papers so that the second phase can prioritize reviewer effort on the most promising submissions.
- Authors of papers that are candidates for phase one relegation should be invited to submit an

- author response prior to the phase-one decision being taken.
- Authors of papers relegated in phase one should be notified and given the option of withdrawing or continuing on the understanding that they may receive no further reviews.
 - In phase one, each paper should receive at least one PC review and at least three reviews in total.

Suggestions

There is no numeric target for relegation. Papers with scores of C and D only (see “PC management” below) are likely to be relegated.

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. The following policy is adapted from Michael Hicks' [FAQ](#).

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 from 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 a 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, authors to indicated 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. As a result, it is our recommendation that PC chairs not rely on authors to declare conflicts, but instead 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 conferences when conflicts are declared.

Authors should inform the PCC by email if unusual circumstances, such as personal or professional conflicts or competing research groups, could lead some of the reviewers to be biased.

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 PCC should strive to identify at least two (PC or external) expert reviewers for each paper that the PCC 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 PCC designates and announces an External Review Committee (ERC) in the CFP.

Suggestions

The PCC 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 PCC 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. Supplementary materials should be made anonymous if possible and reasonable. For example, proofs and datasets should always be anonymized, while source code may be too difficult to reasonably anonymize.

Evaluation Criteria and Acceptance Ratio

Prescriptions

We strive to accept all high-quality submissions with no numerical limit on 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) contains sufficient information for others to reproduce and build upon 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.
- The PC should favor submissions that include enough materials to fully assess the validity and significance of the central claims made by the paper. These materials may be included in the paper itself or in supplementary materials.

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

PC submissions are allowed but submissions by the GC and PCC are not.

PC members will not be allowed to review or discuss other PC papers; hence *all* reviews of PC submissions must be external. The PCC will designate the roster of external reviewers for PC papers, manage the review process, and make the final acceptance decisions, in consultation with the reviewers. In cases where the PCC 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. 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

Authors will be allowed to read and respond to all reviews are available at the time of the author response period. The PCC will make every effort to complete *all* initial reviews before the author-response period. Late initial reviews are unacceptable; such cases will be reported by the PC chair to the SC. 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

- Scores should be made available.
- Authors are 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 PCC should allow authors to provide feedback on review quality, e.g., via a simple rating scale, in addition to rebutting the content of the review.
- The PCC is encouraged to offer authors a right of reply to any substantive critique of the submission. This includes reviews submitted after the author response period and any *substantial* new criticism raised during reviewer discussion.

Decision Rationale

Prescription

PC Chairs are encouraged to ensure that author-visible decision rationales are made available for all papers. The task could be assigned to the paper's guardian. The purpose of the rationale is to provide the authors with a concise, coherent summary of the committee's position; something that is frequently not clear from the sum of the individual reviews.

For accepted papers, the rationale will include any changes requested by the reviewers.

Shepherding

PLDI uses shepherding for two reasons: a) to avoid outstanding work being rejected on the basis of a problem that, though important, can easily be fixed, and b) to improve the quality of all accepted papers.

Prescription

All accepted papers are subject to lightweight shepherding. The Guardian, or another PC member assigned by the PCC, will assist the authors in implementing the reviewers' requests. Authors are expected to modify their papers appropriately; in the event that the reviewers and the shepherds do not come to an agreement that a paper has been revised satisfactorily, the PCC will have the ultimate decision as to whether the paper will be accepted. The shepherding period should end approximately one week before the camera-ready deadline.

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. PC/ERC members should not nominate papers by authors they are conflicted with.
- PC papers may be nominated.

- The PC/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).
- The PCC and GC decide which papers will receive the award. While the number of votes received by nominated papers is an important factor, the PCC and GC 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 PCC must always be consulted before additional reviewers are contacted to avoid conflicts and to ensure topical balance.

PC members must attend the PC meeting in-person. An individual who cannot commit to attending the meeting in person should decline the invitation.

PC members must abide by the [SIGPLAN Republication Policy](#).

PC Management

Prescriptions

PLDI has 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 PCC and paper guardians.

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

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

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.

Keeping the same reviewing form has a benefit for authors and reviewers as they can more easily calibrate and interpret scores if the ratings are well understood. Nierstrasz's [Identify the Champion](#) scoring process has stood the test of time. The review form shall have (at least) the following fields:

- Paper score:
 - A: Good paper. I will champion it at the PC meeting.
 - B: OK paper, but I will not champion it.

C: Weak paper, though I will not fight strongly against it.

D: Serious problems. I will argue to reject this paper.

● Reviewer expertise:

X: I am an expert in the subject area of this paper. I am able to judge accurately whether the work is novel and how much of an advance it represents, and suggest other papers that should be cited.

Y: I am knowledgeable in the area, though not an expert. I have read and understood some number of other papers on the topic and am able to tell whether the work is consistent with the conventions and notations of the area and relates correctly to the papers it cites.

Z: I am not an expert. My evaluation is that of an informed outsider, I may be able to judge if the paper is internally consistent on its own terms but little more.

● Paper summary (reviewer's synopsis provides a useful sanity check)

● Points in favor (encourage positive reviewing)

● Points against (be clear about principal objections)

● Detailed comments for authors (body of review). The comments should be positive and civil in tone, and provide constructive criticism aimed at aiding authors in improving their paper.

Suggestions

- The PCC should acquaint themselves ahead of time with the conference management system (HotCRP), and the facilities it offers.
- PC members should be strongly encouraged to submit reviews as they are completed; this makes it easier for the PCC to monitor progress and identify problems early.
- The PCC may wish to identify major reviewer disagreements and papers without sufficient expertise and seek second opinions where necessary to help resolve the disagreements.
- We recommend that the PCC let all reviewers see decisions for the papers they have reviewed before decisions are publicly announced.

PC Meeting

Prescriptions

The PCC will designate a "COI-PCC" who will handle the PCC is conflicted with.

Suggestions

- Experience has shown that a two-day PC meeting provides adequate time for deliberation while avoiding PC burnout.
- The GC may play the role of "COI-PCC".
- The PCC is encouraged to have one or two dedicated assistants to deal with timekeeping and bookkeeping in order to allow the PCC to focus entirely on the discussion rather than logistical concerns.
- 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 PCC so that the external reviewer can provide additional feedback prior to the final decision.

- The PCC is encouraged to use a multi-round discussion process for papers where an initial consensus is not apparent. Tying up the entire PC on account of a disagreement between two or three reviewers is a poor use of time. Scheduled breaks can be very effective in managing such disputes whilst keeping the PC focussed and engaged.
- The PCC is encouraged to fix a bound on discussion time for any given paper. Papers for which there is no consensus at the bound, should be set aside and revisited at the end of the meeting.

One-minute summaries

Prescriptions

The SC has committed to an experiment for three years (2014-2016). Each day of the conference, a session will feature 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 the conference that can be attended by all in spite of parallel sessions.

Naming of Proceedings

Prescription

The proceedings should be consistently named from year to year. The proper capitalization and name is: "Proceedings of the Nth ACM SIGPLAN Conference on Programming Language Design and Implementation".

Artifact Evaluation Process

Prescription

PLDI is committed to having an Artifact Evaluation Committee (AEC). The AEC is run by a separate chair who selects AEC members, typically advanced graduate students and postdoctoral researchers. The AEC is provided with accepted papers and their reviews. The outcome of the AEC is a seal to indicate that a paper had an artifact that met or exceeded the expectation set in the body of the paper. The seal is printed with the paper and displayed on the conference web site. The AEC may choose to award prizes to distinguished artifacts.

TOPLAS referrals

Prescription

The TOPLAS Editor in Chief may forward papers accepted at TOPLAS before the PC meeting date. These papers must be original contributions, and not extended versions of previous conference papers. The PCC will review the papers and decide whether they are topically of relevance to PLDI. Papers that are deemed relevant will be presented during the conference. Forwarded papers will have a one-page abstract in the proceedings. The title of the paper will be identical to the TOPLAS title with the word "Abstract" prepended.