# Proposal for the creation of the Proceedings of the ACM on Programming Languages

## Name, affiliation, and full contact information for proposer(s)

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## Proposed name of new publication

Proceedings of the ACM on Programming Languages (PACM PL)

## Scope of proposed publication

Programming languages, broadly construed.

## Rationale for new publication

During the first quarter of 2016, the SIGPLAN Executive Committee started discussions among the Steering Committees of the 4 major SIGPLAN conferences (POPL, PLDI, OOPSLA and ICFP) in order to gather information about the level of support towards a possible PACM PL proposal. These discussions led to formal votes. In all but one of these conferences (namely, PLDI) there was strong support for PACM PL.

As such, we propose to create a journal for publication of papers selected for presentation at major SIGPLAN conferences. The first conference to be associated with this journal is OOPSLA, the ACM Conference on Object-Oriented Programming, Systems, Languages and Applications. OOPSLA is one of the top conferences in the field of Programming Languages, ranking in the top 10 publications (conferences and journals) in the category of Software Systems in Google Scholar. OOPSLA's citation-based rankings in Google Scholar place it well above the ACM Transactions on Programming Languages and Systems (TOPLAS) (https://scholar.google.com/citations?view_op=top_venues&hl=en&vq=eng_softwaresystems).

OOPSLA started in 1986, and typically publishes 50 papers/year. Although acceptance rates are not fixed, and fluctuate every year, the conference is highly selective, typically accepting around 25% of submissions.

We start with OOPSLA, because OOPSLA has already adopted the journal-style reviewing process that is required by the PACM series. The next conferences likely to follow are ICFP and POPL, but they will need to adopt a reviewing process compatible with PACM policy.

## Relationship to other ACM publications

ACM TOPLAS has topical overlap with this new publication, but the selection and reviewing processes are substantially different. The papers in the new journal will come primarily from the conferences. The journal does not conduct lengthy review cycles; the selected papers are expected to conform to very high standards at the time of original submission.

## Issues and Bibliographic References

The journal will have *N* issues per year (initially 1), each corresponding to a conference. Each issue will be identified by a volume number corresponding to the year since first publication of the journal, as well as an identifier corresponding to the acronym of the conference. For example: Vol 3(POPL) and Vol 3(OOPSLA) will correspond to conferences POPL and OOPSLA in year 2.

At the start, the journal will only publish issues drawn from conference proceedings. However, as the journal matures, the Advisory and Editorial Boards will discuss the evolution of the publication process to potentially include issues containing papers not first appearing at a conference.

## Solicitation of Papers, Presentations and Travel Support

Every year, there will be *N* calls for papers, each corresponding to a conference. To be considered for the journal, papers will need to be submitted to one of the conferences by the established deadlines.

As a general rule, there will be no out-of-conference, standalone papers, and all accepted papers are expected to be presented at the corresponding conference by one of the authors. Authors of accepted papers who need financial assistance for travel to the conferences should apply for a grant from the SIGPLAN Professional Activities Committee (PAC) program.

## Editorial process

The journal will publish papers selected for presentation at the conferences. This means that the acceptance criteria will match those of the conferences. The major characteristics of the editorial process are as follows.

### Timeline

There are fixed deadlines for submissions, reviews, resubmissions and final decisions. Typically, OOPSLA happens in October, with a submission deadline in March.

### Referees

As has been the case for the past 35+ years, members of the Program Committees are both referees, in that they review the papers, and editors, in that they advise the Program Chair in selecting which papers will be presented. PC members are drafted from among well-known researchers in the field. Additional experts may be recruited to review the papers. Each committee member has a load of 10–24 papers to review in each review cycle, depending on the conference.

### Reviewing and Selection Process

Two rounds of reviewing contribute to the final selection of papers. The first reviewing round assesses the papers according to the quality criteria used by the conferences, and results in the selection of a

subset of submissions that are either accepted as-is or are deemed potentially acceptable. All other papers are rejected in the first round. Authors of potentially acceptable papers are requested to improve specific aspects of the research and the paper. Authors are given a short period of time to perform the revisions and re-submit the paper. The second and final reviewing round has the same reviewers assess how the revision requests have been acted upon by the authors, and whether the final paper maintains, or even improves, the level of contribution of the original submission. Revisions that significantly lessen the contribution of the work, or that fail to adequately address the reviewers' original concerns, will lead to the paper's rejection.

All papers accepted for publication have at least three reviews.

Note that while always conforming to the above guidelines, as well as the editorial policies of PACM in general, conference review processes may vary. For example, POPL, PLDI and OOPSLA currently employ double-blind review, while ICFP and PPoPP do not. Some conferences also permit an author-response period during the first reviewing round, to give authors a chance to comment on reviews before the initial decision is made. These review process variations arise from the experience of the community in determining (and experimenting with) what leads to best decisions. We consider this dynamism to be a healthy practice that engages the community in continually seeking to improve its editorial processes. Review process details are captured in each conference's "contract with authors" documents ("Principles of POPL", "Practice of PLDI", "Functioning of ICFP", etc.), which is referenced from the conference's call for papers, and will be referenced in the front-matter of the conferences' PACM PL issues.

## Governance

### *Advisory Board*
The role of the advisory board is to guide and support the work of the editorial board and to provide institutional memory. The advisory board will consist of the following members:

- Chair of SIGPLAN
- Vice-Chair of SIGPLAN
- Past Chair of SIGPLAN
- One representative from each of the Conferences' Steering Committees
- 1 member-at-large appointed by the ACM Publications Board

The SIGPLAN representatives serve for the same amount of time as their roles in SIGPLAN: three years. The representatives of the conferences Steering Committees and members-at-large will also serve for three years.

### *Editorial Board*
The role of the Editorial Board is to run the day-to-day operations of the journal. The editorial board will consist of:

- Editor-in-Chief: responsible for making sure the Journal information is always up-to-date, for coordination of the Editorial Board, for ensuring that the conferences conform to the editorial

policies of the PACM series, and for planning longer-term editorial strategies. The Editor-in-Chief works directly with all the editors and advisors for proper operation of the journal, but does not play a direct role in paper selection.  The Editor-in-Chief is appointed by the PACM Steering Committee in consultation with the journal's Advisory Board.

- *N* Associate Editors, where *N* is the number of conferences (initially 1): current Program Committee Chairs, responsible for paper reviews and selection. The Associate Editors (aka Program Chairs) will continue to be selected by the conferences' Steering Committees.
- *N* Senior Editors: Associate Editors of the previous year, responsible for supporting the current Associate Editors
- *N* Assistant Editors: Program Committee Chairs of the following year, responsible for assisting the Associate Editors.

The Editor-in-Chief serves for a period of three years. All others have a tenure of one year in their roles. Roll-off dates from one role to another are the last days of the conferences.

## Timeline for Creation of the Journal

The Advisory and Editorial boards are expected to be in place as soon as the journal is approved. We anticipate the inaugural issue to be for OOPSLA, in October of 2017, if operationally possible. Other conferences will join during the following 5 years.

## Journal Evolution

The journal may add other Programming Languages conferences in the future. These additions must be approved by both the Editorial and the Advisory Boards. Each added conference will generate a corresponding additional issue of the journal, and will participate in the governance of the journal via the addition of senior, associate, and assistant editors, as well as a representative of the Steering Committee in the Advisory Board.

In very special circumstances, the journal may have special issues. Possible situations include the celebration of work from a particularly important member of the research community or a particularly important research topic that is of broad interest to programming languages. Such special issues should be an exception, and they require approval by both the Advisory and the Editorial Boards.