

# The Functioning of ICFP

Version 2018

On behalf of the ICFP Steering Committee

Inspired by the Principles of POPL and the Practices of PLDI

## Goal

Our goal is to create a contract between ICFP organizers, ICFP authors, and ICFP participants 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 ICFP 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 (or at least very good) 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*: ICFP Organizing Committee (for a single instance of the conference)

*PC*: ICFP Program Committee

*SC*: ICFP Steering Committee

*SIGPLAN*: ACM Special Interest Group on Programming Languages

## Topics

### Managing Change

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

### Communication

*Prescriptions*

Pending changes to prescriptions and suggestions should be clearly communicated to the community in advance. All changes in prescriptions should be discussed at an open meeting during 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**

### **SC Composition**

#### *Prescriptions*

The Steering Committee meets at every ICFP. Its members are determined by the following rules:

- The current SIGPLAN Chair and SIGPLAN Vice-Chair will be ex officio members of the Steering Committee.
- The General and Program Chairs from future and recent conferences will be members of the Steering Committee. A person that accepts the position of General or Program Chair for ICFP(n) becomes a member of the Steering Committee up to and including the ICFP(n+2) meeting. For the period from ICFP(n-1) to ICFP(n), these members of the SC are the chairs from ICFP(n-2), ICFP(n-1), ICFP(n), and ICFP(n+1).
- Four members of the Steering Committee will be members-at-large, serving four-year terms. Each year, one member-at-large will be replaced with a new member, selected by the Steering Committee.
- The ICFP Publicity Chair, serving a three-year term, will be a member of the Steering Committee.

The General Chair from ICFP(n) will be the Steering Committee Chair for the year ICFP(n+1) to ICFP(n+2) and chair the SC meeting at ICFP(n+2). General Chairs and Program Chairs of future instances of ICFP will be full members of the steering committee as soon as they accept their positions.

### **Selection of Organizing Committee**

#### *Prescriptions*

The General Chair for year X+2 is selected by the SC for year X, subject to the approval of the EC. The General Chair selects the PC Chair with the approval of the SC. The General and

Program Chairs must come from different institutions. The General and PC chairs select other members of the OC.

### *Suggestions*

The selection of General and PC Chairs, over time, should represent the ICFP community, in terms of its diversity in all dimensions.

In recent years, ICFP's Publicity chairs have held three-year terms and the co-located events chairs have held overlapping two-year terms to provide continuity. They have generally chosen their own successors, in consultation with the SC. The positions of Industrial Relations, Video, and Student Research Competition Chairs are starting to follow the same pattern of overlapping two-year terms. 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. The SC strives to identify venues that reflect the diversity of the ICFP community. The conference location alternates between North America and Europe with an occasional stint in another continent (about once every five years).

### *Suggestions*

The conference location should be at least every five years in Asia; if possible even more frequently.

## Program Committee Composition

### *Prescriptions*

The PC is selected by the PC chair in consultation with the General Chair and the ICFP SC. The composition of the PC is subject to approval by the EC Vice Chair. The PC follows the [guidelines for the Programme Chair of a SIGPLAN Event](#).

Topical, personal, and institutional diversity is critical to the long term vitality of ICFP. ICFP 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 institution, 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 by the EC, 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 once every four years. An exception may 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 have 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.
- The size of the PC should be such that, given the expected number of submissions, each PC member will review about 15, but no more than 20 papers.

### *Suggestions*

- The PC chair of year X+1 can be invited to serve (with possibly a lighter reviewing load) for year X as soon as he or she is selected. Alternatively, the future PC chair can be invited to observe the program selection process in year X.
- The PC Chair should avoid selecting PC members who collaborate regularly with each other or PC members from the same institution in the same area.
- PC Chairs are encouraged to include deserving new researchers who have not yet had the opportunity to serve on a PC.
- 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* papers from previous years may skew the ICFP profile.

### **Timeline**

#### *Prescriptions*

The deadline for submissions is advertised as a fixed date. It is firm. No extensions are given.

#### *Suggestions*

- September, Year X-2: General chair selection
- March, Year X-1: PC chair selection
- June, Year X-1: Discuss candidate PC with ICFP SC, then obtain VC approval
- July, Year X-1: Finalize PC
- September, Year X-1: Publish PC and CFP @ ICFP X-1
- March, Year X: Submission deadline
- April, Year X: Author response period
- May, Year X: PC meeting, and author notification
- June, Year X: Camera ready deadline
- August/September, Year X: Proceedings available for download one week before conference
- September, Year X: Conference

Deadlines for submission and author response should be advertised as a fixed date anywhere on earth (AOE).

## Conference Dates

### *Prescriptions*

ICFP takes place in either late August or September.

### *Suggestions*

- The PC chair should consider a paper submission deadline at least one week apart from SPLASH deadlines to accommodate authors wishing to submit to both conferences.
- ICFP notification should be coordinated such that it is least two weeks prior to the deadlines of the colocated workshops.
- The conference should not overlap major religious holidays.

## Conference Format

### *Prescriptions*

ICFP organizers should strive to encompass all of the following items to ensure continuity.

- \* Student research competition
- \* ICFP Programming contest
- \* JFP Special Issue
- \* Co-located events coordinated by designated workshop chairs
- \* Code of conduct as stated in the SIGPLAN anti harrassment policy  
<http://www.sigplan.org/Resources/Policies/Anti-harrassment/>
- \* Keynotes

### *Suggestions*

- \* Single-track schedule of talks

## Review Process

### Author Anonymity

#### *Prescriptions*

ICFP uses the traditional single-blind reviewing process.

### Confidentiality

#### *Prescriptions*

ICFP follows the SIGPLAN policy on [submission confidentiality](#). Reviewers should not interact with authors about their submitted papers. Any interaction should go through the PC Chair.

## Conflicts of Interest

### *Prescriptions*

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

*A conflict of interest is defined as a situation in which the reviewer can be viewed as being able to benefit personally from the outcome of a review, or in which the reviewer is not able to remain objective for personal reasons. If a conflict of interest exists, then the reviewer should decline to review a paper. During the program committee meeting, any committee member who has a conflict of interest regarding a paper may be asked to leave the room for the duration of the discussion.*

*Among the situations in which conflicts are typically considered to exist are between an advisor and their students (forever), an author and their co-authors (until two years after publication), and people in the same institution (until two years after; branches of large companies or different locations of research institutes are considered to be the same institution). If a reviewer feels unable to render an objective judgement for any reason, he or she should notify the program chair.*

Authors and reviewers must declare their COIs when submitting or bidding for papers. The PC chair designates a non-conflicted senior PC member to manage the entire reviewing process of papers that have a PC chair conflict.

## Ownership of Reviews

SIGPLAN policy (<http://www.sigplan.org/Resources/Policies/Review/>) states

"Anonymized reviews are the non-exclusive property of the authors of the reviewed paper: they can be made public or attached to resubmissions of the paper. Anonymized reviews can also be analyzed under the auspices of SIGPLAN for research purposes such as evaluation of bias."

### *Prescriptions*

The PC chair needs to inform PC members that they are subject to the SIGPLAN review policy when they are invited.

## Expert and External Reviews

ICFP 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 competitive, but should reserve the right not to do so in rare cases where a sufficient number of willing external reviewers cannot be identified or where no single expert covering all topics of the paper can be identified. The chair should also strive to identify at least one (PC or external) informed non-expert reviewer.
- The PC chair should strive to ensure that all reviews are available prior to the author response period, unless (in rare cases) the response itself raises critical new issues that justify an additional review. The PC chair should forward reviews that only become available after the author response period out of band to the authors for response.
- External reviewers will be encouraged to participate in online discussion of the papers they have been assigned; however, they should not see unrelated online PC discussions.

### *Suggestions*

Several successful formulas for obtaining expert external reviews have been used in past incarnations of ICFP and other excellent conferences in the field:

- The PC chair may encourage (or even require) PC members to identify candidate external reviewers for each paper they review.
- The PC chair (sometimes in consultation with the PC) identifies a roster of external reviewers after submissions have closed.
- The chair appoints a "guardian" PC member for each paper, whose job is to identify (in consultation with the chair) external reviewers.

## **Submission of Supplementary Material**

### *Prescriptions*

Authors will be allowed to submit supplementary material (proofs, software, datasets, etc.) at the time of submission. The PC and the assigned reviewers may access this material throughout the reviewing process, but they are not required to consult this material.

### *Suggestions*

- Past instances of ICFP also allowed authors to submit some history of the submitted paper, for instance, reviews from other conferences of previously submitted versions of the paper as well as responses to these reviews. Prior reviews and the responses will be made available only to reviewers that declare that they reviewed the paper before. Fresh reviewers will not be able to access the previous set of reviews. This process establishes some continuity between separate conference submissions and serves to diminish the gap to a journal reviewing process.

- PC chairs are encouraged to experiment with an artifact evaluation process, where authors may submit programs, proof scripts, data sets, etc for evaluation after the paper has been accepted. This process has no influence on acceptance of a paper.

## Evaluation Criteria and Acceptance Ratio

### *Prescriptions*

There will be no numerical limit on the number of accepted papers.

### *Suggestions*

- The primary job of the PC is not to attempt to assess the long-term "importance" of work, but to vet the papers for exposure to the wider PL community, which will ultimately render judgment on importance.
- The PC should focus its deliberations on whether
  - there is a genuine research contribution,
  - the approach is fundamentally sound,
  - members of the community will benefit from reading the paper, and
  - the paper (and supporting material, if any) contains 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*

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

[SIGPLAN policy](#) requires that PC papers be held to a higher standard than other papers. For ICFP, the criterion for acceptability of a PC paper is *clear accept*: there is at least one strong advocate and no detractor. 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.

Decisions about PC papers should be made after all other decisions have been made so that the committee knows what a "clear accept" standard means and so that PC papers cannot crowd out non-PC papers.

The policy on PC submission must be clearly explained to candidate PC members when their participation on the PC is solicited. It must also be explained in the call for papers.

## Author Response

### *Prescriptions*

ICFP will allow authors to respond to reviews. Authors will be allowed to read all reviews and scores. Authors will be strongly encouraged to be brief, but there is no prescribed maximum response length. Authors must be allowed at least three working days to respond. Reviewers are expected to acknowledge the response in the final reviews.

### *Suggestions*

- The PC chair may choose to state that the PC is not obliged to read or respond to rebuttals beyond a certain designated length.

## PC Management

### *Prescriptions*

ICFP commits to having 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 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.

### *Suggestions*

- Nierstrasz's [Identify the Champion](#) (ABCD/XYZ) scoring process is considered a best practice to select papers, 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 practice makes it easier for the PC chair to monitor progress and identify problems (e.g., the need for additional reviewers) early. Allowing PC members to change their reviews after they have been submitted increases their willingness to submit reviews as they go.
- The PC chair may wish to identify major reviewer disagreements 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 or negative 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 may wish to use a proxy when visiting the author's web site, to preserve their own anonymity.
- We recommend that the PC chair allows all reviewers (PC or external) to see decisions for the papers they have reviewed before decisions are publicly announced.

## Decision Rationale

### *Suggestions*

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

## Distinguished Papers

Each year, as part of the process of determining which papers to publish, the ICFP PC also selects distinguished papers that they think provide the best balance of importance, exposition, and novelty. These papers are specially held up to the community as papers not to be missed.

### *Suggestions*

- Up to 10% of the accepted papers may be designated for ACM SIGPLAN Distinguished Paper Awards.
- Nominations may be solicited from the PC and ERC, and will also include the top 10% of papers. PC/ERC members should not nominate papers by authors they are conflicted with.
- PC papers may be nominated.
- A selection committee, composed of a number of members of the PC and ERC, reviews the nominations, and selects distinguished papers among them. The usual conflict-of-interest rules apply to this process.

## PC Member Responsibilities

### *Prescriptions*

The main goal of the conference reviewing process is to provide timely high-quality assessments and feedback on submitted papers. Therefore, 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 must not subcontract reading or review writing duties to others. PC members may share and discuss papers with students and colleagues (subject to the usual confidentiality and COI provisions), and incorporate information from such discussions into their review, but the PC member is solely responsible for writing the review. When a student is involved in reviewing, the PC chair should be informed so that the student receives appropriate credit.

PC members must commit to attending the 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 a submission appeared in a workshop, the PC should take into account whether the call for papers for the workshop stated that publication in the workshop was not intended to preclude later publication.

## Paper Categories

### *Prescriptions*

ICFP solicits three kinds of papers, regular research papers, functional pearls, and experience reports. Unlike regular papers, pearls and experience reports do not require original research contributions. Pearls are full-length papers, whereas experience reports are limited to six pages. Pearls and experience reports must be clearly marked as such in the title, they must be submitted in their respective category, and they are reviewed with a different focus.

A pearl is an elegant essay about something related to functional programming. While a pearl is not required to report original research, it should be concise, instructive, and entertaining. The quality of exposition and writing is of tantamount importance.

An experience report is targeted to help create a body of published, refereed, citable evidence that functional programming works in practice or to describe obstacles that prevent it from working. An experience report should be short and to the point: make a claim about how well functional programming worked on your project and why, and produce evidence to substantiate your claim.

### *Suggestions*

The current situation with experience reports is somewhat unsatisfactory, with low success rates. In an attempt to address this, PC Chairs may lift the size limit to eight or even ten pages (full-length). A dedicated subcommittee may be set aside to evaluate experience reports as they need to be judged to a different standard than regular papers and pearls. However, experience reports may be restricted to short presentations.

## **Experimentation**

ICFP encourages General Chairs and PC Chairs to experiment with new approaches to conference management, reviewing, and evaluation of submissions.

## *Prescriptions*

All deviations from prescriptions in this document must be endorsed by the steering committee and must be clearly described in the call for papers.

## *Suggestions*

Items that might be considered are

- External review committee
- Double-blind reviewing recipes
- Artifact evaluation where authors may submit programs, test sets, proof scripts, and so on after a paper has been accepted