PPDP 2020 Call For Papers

TL;DR Abstract deadline: **18 May**; paper deadline: **22 May** (extended). Submissions at: https://easychair.org/conferences/?conf=ppdp2020

The 22nd International Symposium on Principles and Practice of Declarative Programming, PPDP 2020, hosted 8-10 September 2020 by the University of Bologna, Italy.

Due to the COVID-19 pandemic, PPDP 2020 will take place online. The submission, review, and publication process is unaffected. However, the deadlines have been extended by a week to accommodate for the situation.

Scope

The PPDP 2020 symposium brings together researchers from the declarative programming communities, including those working in the functional, logic, answer-set, and constraint handling programming paradigms. The goal is to stimulate research in the use of logical formalisms and methods for analyzing, performing, specifying, and reasoning about computations, including mechanisms for concurrency, security, static analysis, and verification.

Submissions are invited on all topics related to declarative programming, from principles to practice, from foundations to applications. Topics of interest include, but are not limited to:

- Language Design: domain-specific languages; interoperability; concurrency, parallelism and distribution; modules; functional languages; reactive languages; languages with objects; languages for quantum computing; languages inspired by biological and chemical computation; metaprogramming.

- Declarative languages in artificial intelligence: logic programming; database languages; knowledge representation languages; probabilistic languages; differentiable languages.

- Implementations: abstract machines; interpreters; compilation; compile-time and run-time optimization; memory management.

- Foundations: types; logical frameworks; monads and effects; semantics.

- Analysis and Transformation: partial evaluation; abstract interpretation; control flow; data flow; information flow; termination analysis; resource analysis; type inference and type checking; verification; validation; debugging; testing.

- Tools and Applications: programming and proof environments; verification tools; case studies in proof assistants or interactive theorem provers; certi-

fication; novel applications of declarative programming inside and outside of CS; declarative programming pearls; practical experience reports and industrial application; education.

The PC chair will be happy to advise on the appropriateness of a topic.

PPDP will take place 8-10 September 2020 virtually hosted by the University of Bologna, Italy, co-organized with the 29th Int'l Symp. on Logic-Based Program Synthesis and Transformation (LOPSTR 2020) and the International conference on Microservices 2020.

Submissions

Submissions are welcome on easychair at https://easychair.org/conferences/?conf=ppdp2020

Submission Categories

Submissions can be made in three categories:

- regular Research Papers,
- System Descriptions, and
- Experience Reports.

Submissions of Research Papers must present original research which is unpublished and not submitted elsewhere. They must not exceed 12 pages ACM style 2-column (including figures, but excluding bibliography). Work that already appeared in unpublished or informally published workshop proceedings may be submitted (please contact the PC chair in case of questions). Research papers will be judged on originality, significance, correctness, clarity, and readability.

Submission of System Descriptions must describe a working system whose description has not been published or submitted elsewhere. They must not exceed 10 pages and should contain a link to a working system. System Descriptions must be marked as such at the time of submission and will be judged on originality, significance, usefulness, clarity, and readability.

Submissions of Experience Reports are meant to help create a body of published, refereed, citable evidence where declarative programming such as functional, logic, answer-set, constraint programming, etc., is used in practice. They must not exceed 5 pages **including references**. Experience Reports must be marked as such at the time of submission and need not report original research results. They will be judged on significance, usefulness, clarity, and readability.

Possible topics for an Experience Report include, but are not limited to:

- insights gained from real-world projects using declarative programming

- comparison of declarative programming with conventional programming in the context of an industrial project or a university curriculum

- curricular issues encountered when using declarative programming in education

- real-world constraints that created special challenges for an implementation of a declarative language or for declarative programming in general

- novel use of declarative programming in the classroom

- programming pearl that illustrates a nifty new data structure or programming technique.

Supplementary material may be provided via a link to an extended version of the submission (recommended), or in a clearly marked appendix beyond the above-mentioned page limits. Reviewers are not required to study extended versions or any material beyond the respective page limit. Material beyond the page limit will not be included in the final published version.

Format of a submission

For each paper category, you must use the most recent version of the "Current ACM Master Template" which is available at https://www.acm.org/publications/proceedings-template. The most recent version at the time of writing is 1.70. You must use the LaTeX sigconf proceedings template as the conference organizers are unable to process final submissions in other formats. In case of problems with the templates, contact ACM's TeX support team at Aptara.

Authors should note ACM's statement on author's rights which apply to final papers. Submitted papers should meet the requirements of ACM's plagiarism policy.

Requirements for publication

Due to the shift to an online event, registration fees will be decreased to cover only the costs of publication and online event hosting. At least one author of each accepted submission will be expected to register and present the work at the conference. The PC chair may retract a paper that is not presented. The PC chair may also retract a paper if complaints about the paper's correctness are raised which cannot be resolved by the final paper deadline.

Important dates

The organizers appreciate that potential authors may be disadvantaged by the COVID-19 pandemic and resulting disruption. **To encourage submissions, short extensions are available on request.** To request an extension, please register an abstract before the abstract deadline and write to the PC chair before the submission deadline explaining the circumstances and duration of the extension.

Title and abstract (extended):	18	May	2020 (AoE)
Paper submission (extended):	22	May	2020 (AoE)
Rebuttal period (48 hours):	22-23	June	2020 (AoE)
Author notification:	3	July	2020
Final paper version:	21	July	2020
Conference:	8-10	Sept	2020

Organization

Program committee chairs:	Andreas Abel,	Gothenburg University
	James Cheney,	The University of Edinburgh
Steering committee chair:	James Cheney,	The University of Edinburgh
General chair:	Maurizio Gabbrielli,	University of Bologna

Program committee

Andreas Abel (co-chair)	Gothenburg University, SE
Kenichi Asai	Ochanomizu University, Tokyo, JP
James Cheney (co-chair)	The University of Edinburgh, UK
Ugo Dal Lago	University of Bologna, IT & INRIA Sophia Antipolis, FR
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