

DNA29 – 29th International Conference on DNA Computing and Molecular Programming

First Call for Papers

Tohoku University, Sendai, Japan
September 11-15, 2023
<https://dna29.org/>

The Meeting

Research in DNA computing and molecular programming draws together mathematics, computer science, physics, chemistry, biology, and nanotechnology to address the analysis, design, and synthesis of information-based molecular systems. This annual meeting is the premier forum where scientists with diverse backgrounds come together with the common purpose of applying principles and tools of computer science, physics, chemistry and mathematics to advance molecular-scale engineering and biology. The 29th International Conference on DNA Computing and Molecular Programming (DNA29), organized under the auspices of the International Society for Nanoscale Science, Computation and Engineering (ISNSCE), will focus on the most important recent experimental and theoretical results.

Solicitation for Papers

Papers and presentations are sought in all areas that relate to biomolecular computing, including, but not restricted to: algorithms and models for computation on biomolecular systems; computational processes in vitro and in vivo; molecular switches, gates, devices, and circuits; molecular folding and self-assembly of nanostructures; analysis and theoretical models of laboratory techniques; molecular motors and molecular robotics; information storage; studies of fault-tolerance and error correction; software tools for analysis, simulation, and design; synthetic biology and in vitro evolution; applications in engineering, physics, chemistry, biology, and medicine.

Key Dates

Full paper (track A) and abstract (track B) submission	May 3, 2023 (11:59PM AoE)
Notification of paper acceptance	June 19, 2023
Poster (track C) submission	June 30, 2023 (11:59PM AoE)
Revised track A manuscripts due	July 3, 2023
Notification of poster acceptance	July 24, 2023
Early bird registration deadline	June 24, 2023
Registration deadline (late registration available)	August 1, 2023
Conference	Sept. 11-15, 2023

Note that submission deadlines are given in the AoE (Anywhere on Earth) time zone (UTC-12).

Invited Speakers

- [Masami Hagiya](#) (The University of Tokyo)
- [Yusuke Sato](#) (Kyushu Institute of Technology)
- [Chunhai Fan](#) (Shanghai Jiao Tong University)
- [Petra Berenbrink](#) (Universität Hamburg)
- [Olga Milenkovic](#) (University of Illinois Urbana-Champaign)
- The Winner of the Rozenberg Tulip Award in DNA Computing

Instructions for Authors

Electronic Submissions: All papers and abstracts should be submitted electronically via EasyChair following the instructions and link at the conference web page. Papers must be submitted in PDF format. We encourage authors to enter information on their potential submissions early; partial submissions can always be updated or removed until the submission deadline.

I. Submissions to be considered for oral presentations (Tracks A and B)

Authors submitting a paper and/or proposal for a presentation may choose between two submission tracks. Submissions for oral presentations can be submitted to one of the two tracks (A) or (B).

Track A - Full Paper: For authors who want their full papers to be published in the Leibniz International Proceedings of Informatics (LIPIcs) conference proceedings. Submissions to this conference will be published in accordance with the Berlin Declaration of Open Access to Knowledge in the Sciences and Humanities, for more information see: <https://openaccess.mpg.de/Berlin-Declaration>. Additionally, submissions are also expected to adhere to the Core Practices of the Committee on Publication Ethics (COPE): <https://publicationethics.org/core-practices>. Finally, submissions should conform to the following guidelines:

- Submissions to Track A may not be previously published or simultaneously submitted to another conference or journal for publication.
- The paper is formatted in LaTeX using the LIPIcs-v2021 style. Please follow the LIPIcs formatting instructions found at <https://submission.dagstuhl.de/documentation/authors>. Papers that are not formatted using the LIPIcs style may be rejected without review.
- Initial submissions are to be made in PDF format to the EasyChair conference system, authors of accepted and revised papers should be prepared to provide LaTeX files to the publisher.
- Each paper contains an abstract that briefly describes the primary results and their importance.
- The main text of the paper is limited to 15 pages; note that this count does NOT include the title, authors, affiliations and abstract (the 'title page') or bibliography. An optional technical appendix is permitted if the authors deem it necessary to back up the claims made in the first 15 pages. However, it is at the discretion of the PC whether to read

beyond the first 15 pages as part of the review process. If the technical appendix is 5 pages or less, it will be included in the proceedings.

- Selected papers will be published in the proceedings, available as part of the LIPIcs series.

Track B – One-page abstract with accompanied material: Primarily for authors submitting experimental results who plan to submit to a journal rather than publish in the conference proceedings. For a Track B submission to be considered, it must contain at least 67% (i.e. 2/3) new content, beyond that which has been presented at previous years of the DNA conference, though substantially expanded work previously presented as a poster may be considered. Abstracts for work recently submitted to, or published in, a journal will also be considered. To be considered for oral presentation, submissions should conform to the following guidelines.

- A one-page abstract: The total length of the abstract should not exceed 1 page (11 point type, single spaced, 1 inch margins). The abstract describes the primary results and their importance.
- Supporting documentation: In addition to the one-page abstract, authors must also submit supporting documentation sufficient for the program committee to understand the details of the work and evaluate its merit for oral presentation. Documentation should be comparable in level of detail to a preliminary manuscript, a thesis chapter, or some other form of publication. Only the one-page abstract will appear in the supplementary proceedings at the conference. Track B papers unaccompanied by adequate documentation will be rejected without review. Authors lacking substantial supporting documentation are encouraged instead to submit a one-page abstract to Track C.

II. Poster submissions (Track C)

For authors interested in presenting their work only in the poster session, including research or projects of interest to the conference community. The abstract submission will be submitted electronically via EasyChair following the instructions and link at the conference web page. All poster submissions should be in PDF format and conform to the following guidelines:

- The total length of the abstract should not exceed 1 page (11 point type, single spaced, 1 inch margins).
- The one-page abstract should describe the primary results and their importance.
- At the discretion of the PC, a small number of high-quality posters may be selected for short (10 minute) presentations at the conference. For consideration, optional supporting documentation is strongly encouraged to be submitted in addition to the one-page abstract.

Prizes

The conference and the ISNSCE society will award three prizes: “DNA 29 Best Student Paper Award”, “ISNSCE Best Student Presentation Award”, and “Best Student/Postdoc Poster Award”. Recipients of the prize will be notified at the time of the conference banquet. The committee reserve the right to limit each presenter to a maximum of one prize.

Eligibility for best student paper award: This is for a Track A paper whose lead author(s) is a student at the time of submission. To be fully considered for this award, a senior author or advisor will be asked to submit a letter justifying the nomination and indicating which author(s) should be considered for the award.

Eligibility for best student presentation award: This is for a Track A or Track B talk whose presenter is a student and a lead author on the paper at the time of submission.

Eligibility for best student/postdoc poster award: This is for a poster whose lead author(s) is a student or postdoc at the time of submission.

Program Committee

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If you have any questions, please contact the PC chairs at dna29@easychair.org.