



CALL FOR PAPERS

ISNSCE
International Society for Nanoscale
Science, Computation and Engineering

DNA19: The Nineteenth International Meeting on DNA Computing and Molecular Programming

Arizona State University, Tempe AZ USA, September 22-27, 2013
dna19.biodesign.asu.edu

THE MEETING

Research in DNA computing and molecular programming draws together many disciplines (including mathematics, computer science, physics, chemistry, material science and biology) 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 computation and nanoengineering. Continuing this tradition, the 19th International Conference on DNA Computing and Molecular Programming (DNA19), organized under the auspices of the International Society for Nanoscale Science, Computation and Engineering (ISNSCE), will focus on important recent experimental and theoretical results.

SOLICITATION FOR PAPERS

Papers and presentations are sought in all areas that relate to DNA computing and molecular programming, 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; 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.

IMPORTANT DATES

Paper/presentation submission deadline:	April 25, 2013
Notification of acceptance:	June 6, 2013
Poster submission deadline:	June 15, 2013
Revised manuscripts due:	June 30, 2013
Poster acceptance notification:	July 15, 2013
Registration Deadline:	July 20, 2013
Conference:	September 22-27, 2013

INVITED SPEAKERS

Alessandra Carbone, Pierre and Marie Curie University, Paris, France.

Hendrik Dietz, Technical University of Munich, Garching, Germany.

Eric Goles, Adolfo Ibáñez University, Santiago, Chile.

Chengde Mao, Purdue University, West Lafayette, Indiana.

Lulu Qian, California Institute of Technology, Pasadena, California.

Yannick Rondelez, CNRS Researcher, University of Tokyo, Tokyo, Japan.

RELATED EVENTS

- **Tutorial Day**: September 22, 2013 – tutorials covering important topics related to biomolecular computing.
- **Nanoday**: September 27, 2013 – featuring current topics in nanotechnology corresponding to the interests of DNA computing and molecular programming.

INSTRUCTIONS FOR AUTHORS

Electronic Submissions: All papers and abstracts should be submitted electronically following the instructions and link at the conference web page, dna19.biodesign.asu.edu. Papers must be submitted in PDF format. The use of LATEX is strongly encouraged for Track A submissions, as it will be required for the revised manuscript included in the LNCS proceedings of accepted papers.

TRACKS

I. Submissions to be considered for oral presentations

Authors submitting a paper and/or proposal for oral presentation may choose between two submission tracks (A) or (B) described below. The submission site will open by February 15, 2013 and close on April 25, 2013 (author's local time).

Please note that there are separate arrangements for poster submissions. The later deadline allows authors to submit abstracts for poster presentation, of papers not selected for oral presentation.

Track A - Full paper: For authors who want their full papers to be published in the conference proceedings. Submissions (a single .pdf file) should conform to the following guidelines:

- The total length of the paper does not exceed 12 pages and is expected to be formatted in

LATEX for the Springer-Verlag Lecture Notes in Computer Science (LNCS). Please follow the formatting instructions at: <http://www.springer.de/comp/lncs/authors.html>.

- Each paper should contain an abstract which briefly describes the primary results and their importance.
- Selected papers will be published in the proceedings, available at the conference and as part of the LNCS series. Revised manuscripts submitted by the June 30 deadline will be the final versions for the LNCS proceedings. Submissions to Track A may not be previously published or simultaneously submitted to another conference or journal for publication.

Track B - One page abstract with accompanying material: Primarily for authors submitting experimental results that plan to submit to a journal rather than publish in the conference proceedings. (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 single .pdf file containing

- *A one-page abstract:* The total length of the abstract should not exceed 1 page (11 point type, single spaced, 1 inch margins). The one-page abstract must describe the primary results and their importance.
- *Accompanying documentation:* Authors **must** attach to the abstract a preliminary manuscript, a thesis chapter or some other form of supporting documentation that can be used by the program committee to evaluate the merit of the work for oral presentation.

Only the one-page abstract will appear in the supplementary proceedings at the conference. Track B papers unaccompanied by adequate documentation will not be eligible for oral presentation.

II. Poster submissions

For authors interested in presenting their work only in the poster session, the abstract submission will be through the same website dna19.biodesign.asu.edu which will open on February 15, 2013 and will close on June 15, 2013. Submissions should conform to the following guidelines:

- The total length of the abstract should not exceed 1 page (letter, 11 point type, single spaced, 1 inch margins).
- The one-page abstract should describe the primary results and their importance.

STUDENT PRIZES

The best paper and the best presentation with a student as the lead and presenting author will be awarded travel prizes. For eligible papers, a brief recommendation letter (such as from the student's advisor) should be emailed to dna19@asu.edu. Recipients of the prize will be notified at the time of acceptance. Some other student scholarships may also be available.

STEERING COMMITTEE

Natasha Jonoska (Chair)	Mathematics, University of South Florida, USA
Luca Cardelli	Microsoft Research Cambridge, UK
Anne Condon	Computer Science, University of British Columbia, Canada
Masami Hagiya	Computer Science, University of Tokyo, Japan
Lila Kari	Computer Science, University of Western Ontario, Canada
Satoshi Kobayashi	University of Electro-Communication, Chofu, Japan
Chengde Mao	Chemistry, Purdue University, USA
Satoshi Murata	Bioengineering & Robotics, Tohoku University, Japan
John Reif	Computer Science, Duke University, USA
Grzegorz Rozenberg	Computer Science, University of Leiden, The Netherlands
Nadrian Seeman	Chemistry, New York University, USA
Friedrich Simmel	Bionanotechnology, Technische Universitat Munchen, Germany
Andrew Turberfield	Physics, Oxford University, UK
Hao Yan	Chemistry and biochemistry, Arizona State, USA
Erik Winfree	Computer Science, Bioengineering, Computation & Neural Systems California Institute of Technology, USA

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Damien Woods	Computing and Mathematical Sciences, California Institute of Technology, USA
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Peng Yin	Department of Systems Biology, Harvard Medical School, USA
Byoung-Tak Zhang	School of Computer Science & Engineering, Seoul National University, South Korea

ORGANIZING COMMITTEE

Hao Yan (chair)
Jeanette Nangreave
Yan Liu