CALL FOR PAPERS ADG 2021

Thirteenth International Conference on Automated Deduction in Geometry RISC, Hagenberg, September 15-17, 2021 https://www.risc.iku.at/conferences/adq2021

Overview:

ADG is a forum to exchange ideas and views, to present research results and progress, and to demonstrate software tools at the intersection between geometry and automated deduction. The conference is held every two years. The previous editions of ADG were held in Nanning in 2018, Strasbourg in 2016, Coimbra in 2014, Edinburgh in 2012, Munich in 2010, Shanghai in 2008, Pontevedra in 2006, Gainesville in 2004, Hagenberg in 2002, Zurich in 2000, Beijing in 1998, and Toulouse in 1996. The 13th edition, ADG 2021, is co-organized with the Research Institute for Symbolic Computation (RISC), and will be held in Hagenberg, Austria, July 13-15, 2021. If the conference cannot be organized with full in-person participation, it will be organized online or in a mixed manner.

Scope:

Relevant topics include (but are not limited to):

- polynomial algebra, invariant and coordinate-free methods;
- probabilistic, synthetic, and logic approaches, techniques for automated geometric reasoning from discrete mathematics, combinatorics, and numerics;
 - interactive theorem proving in geometry;
- symbolic and numeric methods for geometric computation, geometric constraint solving, automated generation/reasoning and manipulation with diagrams;
- design and implementation of geometry software, automated theorem provers, special-purpose tools, experimental studies;
- applications of ADG in mechanics, geometric modelling, CAGD/CAD, computer vision, robotics and education.

Special Focus:

This edition of ADG will have additional *special focus topic*: links between automated deduction in geometry and robotics.

Submission Guidelines:

- We invite submission of extended abstracts (3 to 12 pages).
- The submissions abstracts must address the following aspects explicitly.
- Problem: What is the problem/question/objective?
- Motivation: Why do we work on the problem? What is the importance?
- State of the Art: What has been done already on the problem?
- Contribution: What is the main original contribution?
- Main Idea: What is the main idea underlying the contribution?
- The submissions should follow the standard Springer LNCS Proceedings format.
- Extended abstracts are to be submitted as PDF via <u>EasyChair</u> (at http://www.easychair.org/conferences/?conf=adg2021).
- If you have any problems with the submission of your abstract, or questions concerning ADG 2021 or EasyChair, please contact adg2020@easychair.org.

Refereeing and Publication:

- The submitted extended abstracts will be reviewed by the Program Committee.
- Informal proceedings (of extended abstracts accepted for presentation) in printed form will be available at the conference. Also, informal proceedings in digital form will be available from the conference web page. The authors are free to submit their abstracts for publication in other forums.
 - The authors of extended abstracts accepted for presentation at the conference will be invited to

submit their full papers for publication in formal postproceedings of ADG 2021 after the conference (The postproceedings of ADG 1996, ADG 1998, ADG 2000, ADG 2002, and ADG 2004, ADG 2006, ADG 2010, ADG 2012 and ADG 2014 appeared as LNAI 1360, LNAI 1669, LNAI 2061, LNAI 2930, LNAI 3763, LNAI 4869, LNCS 6877, LNAI 7993 and LNAI 9201 respectively).

 All participants are encouraged to bring along posters on their geometric work (irrespective of whether it is to be presented at the conference) for display during ADG 2021.

Important Dates:

- May 31 June 7 (extended deadline): extended abstracts submission
- July 7: notification of acceptance
- August 15: final version due
- August 15: early registration
- September 15-17: ADG 2021

Invited Speakers:

- Gilles Dowek (INRIA, France)
- Manfred Husty (University of Innsbruck, Austria)
- Christoph Koutschan (Johann Radon Institute, Austria)
- Pedro Quaresma (University of Coimbra, Portugal)
- Wolfgang Windsteiger (RISC, Johannes Kepler University, Austria)

General Chair:

Zoltán Kovács (JKU Linz School of Education, Austria)

Program Comittee Chair:

Predrag Janičić (University of Belgrade, Serbia)

Program Committee:

- Armin Biere (FMV, Johannes Kepler University, Austria)
- <u>Francisco Botana</u> (University of Vigo, Spain)
- Jose Capco (RISC, Johannes Kepler University, Austria)
- Xiaoyu Chen (Beihang University, China)
- <u>Thierry Dana-Picard</u> (Jerusalem College of Technology, Israel)
- <u>Jacques Fleuriot</u> (University of Edinburgh, UK)
- Georg Grasegger (The Johann Radon Institute for Computational and Applied Mathematics, Austria)
- Markus Hohenwarter (JKU Linz School of Education, Austria)
- <u>Tetsuo Ida</u> (University of Tsukuba, Japan)
- <u>Julien Narboux</u> (University of Strasbourg, France)
- Walther Neuper (University of Technology, Graz, Austria)
- Pavel Pech (University of South Bohemia, Ceske Budejovice, Czechia)
- <u>Martin Pfurner</u> (University of Innsbruck, Austria)
- Pedro Quaresma (University of Coimbra, Portugal)
- <u>Tomás Recio</u> (Universidad Antonio de Nebrija, Spain)
- Pascal Schreck (University of Strasbourg, France)
- Wolfgang Schreiner (RISC, Johannes Kepler University, Austria)
- Ileana Streinu (Smith College, USA)
- <u>Dingkang Wang</u> (Chinese Academy of Sciences, China)
- <u>Dongming Wang</u> (Beihang University and Guangxi University for Nationalities, China)
- <u>Jing Yang</u> (Guangxi University for Nationalities, China)