

HOMOTOPY ALGEBRAS, DEFORMATION THEORY AND QUANTIZATION

Banach Center, Będlewo (POLAND),
16 – 22 September, 2018



First Announcement

Aims and scope: The conference aims at bringing together mathematicians, mathematical physicists, and physicists working in the areas of homotopy algebras, deformation theory, theory of operads and props, and quantisation. Its goal is to foster cooperations and exchanges of ideas and latest news. The workshop will focus on the highly active research fields of homotopy algebras, deformation of higher algebraic structures and Grothendieck-Teichmüller group, as well as on their ramifications in physics and other branches of mathematics.

The main topics of the conference are:

- Deformations of algebraic and related geometric structures.
- Higher Algebraic Structures - Grothendieck-Teichmüller group.
- Derived Algebraic Geometry.
- Deformation quantisation - mathematical aspects and physical applications.
- Deformations of higher structures and their applications in theoretical Physics.

Program of the conference: In order to lay the grounds for a fruitful interaction between the participants, the following introductory courses will be delivered in the first part of the conference.

- Giovanni Felder (ETH Zürich) *“Derived representation schemes and supersymmetric gauge theory”*
- Simone Gutt (Université Libre de Bruxelles) *“Deformation theory and group actions”*
- Sergei Merkulov (Université du Luxembourg) *“Graph complexes in algebra and geometry - recent advances”*
- Ping Xu (Penn State University) – *to be confirmed*

More advanced and technical talks will be delivered by several **invited speakers:**

- Martin Bordemann (Université de Haute Alsace)
- Alberto Cattaneo (Universität Zürich) - *to be confirmed*
- Kenji Iohara (Université de Lyon)
- Andrey Lazarev (Lancaster University)
- Wendy Lowen (Universiteit Antwerpen)
- Michael Penkava (University of Wisconsin-Eau Claire)
- Norbert Poncin (Université du Luxembourg)
- Oleg Sheinmann (Steklov Mathematical Institute)
- Christoph Schweigert (Universität Hamburg)
- Jim Stasheff (University of Pennsylvania)
- Friedrich Wagemann (Université de Nantes)

A limited number of contributed talks and a poster session are also included in the program. Interested participants are kindly asked to provide us with title and short abstract of their proposal for a contributed talk/poster, not later than **April 30, 2018**. The application for a contributed talk/poster can be submitted during the registration process (please use the “Additional information” field) or directly to the e-mail address homotopy2018@impan.pl. The proposals for a contributed talk/poster will be reviewed by the Scientific Committee.

Conference venue: The Mathematical Research and Conference Center in Będlewo (MRCC) is the conference venue of the Banach Center – a branch of the Institute of Mathematics of the Polish Academy of Sciences. The main goal of the MRCC is to organise conferences and workshops devoted to various subjects of Mathematics, and to create an atmosphere fostering group research. Surrounded by forests, the MRCC serves as an excellent location for the scientific meetings supported and/or acknowledged by the Banach Center. The MRCC offers a comfortable accommodation in 24 single and 43 twin rooms and full meal served in a neo-gothic palace. The organisers will arrange taxi/bus transfers to/from the nearby Poznań or Mosina. Poznań is a city situated midway between Berlin and Warsaw with convenient flight connections to several European cities and train connections to Warsaw and Berlin.

More information about the Conference Center in Będlewo can be found on its web page: <http://www.impan.pl/en/activities/bedlewo-conference-center/about-center>.

Registration: Participants are kindly asked to use the registration form <https://www.impan.pl/en/activities/banach-center/conferences/18-homotopy/rejestracja>.

The deadline for the first round of registration is **April 30, 2018**.

Late registration (after the deadline) will be possible only in case of free places.

Conference fee: The conference is partially supported by the Banach Center, the Warsaw Center of Mathematics and Computer Science and the University of Luxembourg.

The conference fee is estimated at **260 EUR** (or **280 EUR** for an accompanying person), possibly converted in local currency (**PLN**). The fee covers the (full-board) accommodation in Będlewo, the participation to social events (bonfire, conference dinner, excursion), conference materials and coffee breaks. Participants are kindly requested to take care of their own travel arrangements.

A limited number of grants will be available for PhD students, reducing the fee to **100 EUR**. Interested participants can apply by sending their CV and list of publications to the Organising Committee homotopy2018@impan.pl.

The conference fee can be paid cash upon arrival. Bank transfer is also allowed but participants should notify it to the Organising Committee during the registration process. Afterwards they will receive details of the bank transfer via e-mail.

Additional information: More information about the conference can be found on the web page <https://www.impan.pl/18-homotopy>. The Conference program and schedule, the list of participants, and the travel information will appear there in due course.

In case of any questions feel free to contact the Organising Committee using the e-mail address homotopy2018@impan.pl or the direct addresses of its members.

Scientific Committee:

- Alice Fialowski (University of Pécs and Eötvös Loránd University)
- Janusz Grabowski (Polish Academy of Sciences)
- Sergei Merkulov (University of Luxembourg)
- Martin Schlichenmaier (University of Luxembourg)
- Stefan Waldmann (University of Würzburg)

Organising Committee

- Katarzyna Grabowska (konieczn@fuw.edu.pl)
- Michał Józwiowski (mjozwikowski@impan.pl)
- Giovanni Moreno (javier.de.lucas@fuw.edu.pl)
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