

Workshop: Homotopy theory meets polyhedral combinatorics

Universidad de Barcelona, 16-20 January 2023

Program

Monday 16

11h-12h30 Welcome session
13h-14h30 lunch
14h30-17h00 **Guillaume Laplante-Anfossi**: *Iterated loop spaces*

Tuesday 17

10h-12h30 **Daria Poliakova**: *The categorical 2-associahedron*
13h-14h30 lunch
14h30-17h **Luis Crespo**: *Realizing multiassociahedra*

Wednesday 18

10h-12h30 *Open problems session*
13h-14h30 lunch
14h30-17h **Andy Tonks**: *The f-vector of the diagonal of the associahedron*

Thursday 19

10h-12h30 **Vincent Pilaud**: *Shuffle product and multiplihedra*
13h-14h30 lunch
14h30-15:15h **Daria Poliakova**: *The multiplihedron as a categorical 2-associahedron*
15h15-16:00h **Vincent Pilaud**: *Two Conjectures on the f-vector of the diagonal associahedron*
15h30-16:15h **Mónica Blanco** and **Luis Crespo**: *Constructing the 3rd diagonal associahedron*
16:15h- 17:00h Undergraduate presentations: *The octahedron and dessin d'enfants*

Friday 20

10h00-12h *Wrap-up session*

List of Participants

Mónica Blanco, Universidad de Cantabria
Luis Crespo, Universidad de Cantabria
Guillaume Laplante-Anfossi, University of Melbourne (Australia)
Arnau Padrol, Universitat de Barcelona
Eva Philippe, Sorbonne Université (France)
Julian Pfeifle, U. Politecnica de Catalunya
Vincent Pilaud, Ecole Polytechnique and CNRS (France)
Daria Poliakova, Syddansk Universitet, Center for Quantum Mathematics (Denmark)
Francisco Santos, Universidad de Cantabria
Andy Tonks, Universidad de Málaga