



# Higher Structures in Geometry and Mathematical Physics

**Monday, May 22, 2023**

**GAP: Bernhard Keller (Université Paris Cité) : Singularity categories, Leavitt path algebras and Hochschild homology - Amphitheater Darboux (10:30 AM - 11:30 AM)**

**GAP: Domenico Fiorenza, Sapienza (Università di Roma) : String bordism invariants in dimension 3 from  $U(1)$ -valued TQFTs - Amphitheater Darboux (11:30 AM - 12:30 PM)**

**GAP: Leonid Positselski, (Czech Academy of Sciences, Prague) : The homomorphism removal and repackaging construction - Amphitheater Darboux (2:15 PM - 3:15 PM)**

**GAP: Dominique Mouhanna, Deputy Director of IHP : Welcome Address - Amphitheater Darboux (3:15 PM - 3:30 PM)**

**GAP: Wendy Lowen, (Universiteit Antwerpen) : Higher structures and deformations of non-commutative spaces - Amphitheater Darboux (4:00 PM - 5:00 PM)**

**GAP: Poster Session - Amphitheater Darboux (5:00 PM - 6:00 PM)**

## Tuesday, May 23, 2023

**GAP: Martin Markl, (Czech Academy of Sciences, Prague) : Operads and the blob complex - Amphitheater Darboux**  
(9:00 AM - 10:00 AM)

**GAP: Julien Grivaux, (Sorbonne Univ) : Algebraic structures attached to a closed embedding - Amphitheater Darboux**  
(10:30 AM - 11:30 AM)

**GAP: Shahn Majid, (Queen Mary Univ.) : Braided bimodules, quantum jet bundles and quantum geodesics -**  
Amphitheater Darboux (11:30 AM - 12:30 PM)

**GAP: Kirsten Wickelgren (Duke University) : A quadratically enriched zeta function - Amphitheater Darboux** (2:00 PM  
- 3:00 PM)

**GAP: Adrian Ocneanu, (Pennsylvania State University), We describe a stronger analog of the Weyl character formula,**  
**which has a similar form, but generates all the representation vectors, rather than only their weights.** - Amphitheater  
Darboux (3:30 PM - 4:30 PM)

## Wednesday, May 24, 2023

**GAP: Benoît Dherin, (Google) : Symplectic microgeometry and quantization - Amphitheater Darboux (9:00 AM - 10:00 AM)**

**GAP: Olivier Schiffmann, (Université Paris-Saclay) : Cohomological Hall algebras associated to curves in surfaces - Amphitheater Darboux (10:30 AM - 11:30 AM)**

**GAP: Thomas Willwacher, (ETH Zürich) : Graph complexes and moduli spaces of curves - Amphitheater Darboux (11:30 AM - 12:30 PM)**

# Thursday, May 25, 2023

**GAP: Muriel Livernet, (Univ. Paris Cité) : Homotopy theory of spectral sequences - Amphitheater Darboux (9:00 AM - 10:00 AM)**

**GAP: Alexander Berglund, (Stockholm University) : Higher structures in automorphisms of manifolds - Amphitheater Darboux (10:30 AM - 11:30 AM)**

**GAP: Christoph Schweigert, (Universität Hamburg) : String-net methods for CFT correlators - Amphitheater Darboux (11:30 AM - 12:30 PM)**

**GAP: Mikhail Kapranov, (Kavli IPMU) : Categorification of Euler's continuants, N-spherical functors and periodic semiorthogonal decompositions - Amphitheater Darboux (2:00 PM - 3:00 PM)**

**GAP: Pavel Mnev, (University of Notre Dame) : On the Fukaya-Morse A-infinity category - Amphitheater Darboux (3:30 PM - 4:30 PM)**

# Friday, May 26, 2023

**GAP: Ralph Kaufmann, (Purdue University) : Higher operations from algebra and geometry. - Amphitheater Darboux**  
**(9:00 AM - 10:00 AM)**

**GAP: Yuri Berest, (Cornell University) : Spaces of quasi-invariants and homotopy Lie groups - Amphitheater Darboux**  
**(10:30 AM - 11:30 AM)**