

Program (Monday, January 15, 2024)

M-theory and Mathematics: Classical and Quantum Aspects

- 08:55 - 09:00 am ● Welcome remark by Hisham Sati
- 09:00 - 09:45 am ● Neil Lambert
Non-Relativistic M2-Branes and AdS/CFT
- 10:00 - 10:45 am ● Carlos Shahbazi
The Differential Geometry and Topology of Four-Dimensional Universal Supergravity
- 11:00 - 11:45 am ● Mario Garcia-Fernandez
Gauge Theory for String Algebroids
- 12:00 - 01:30 pm ● Lunch Break
- 01:30 - 02:15 pm ● Grigorios Giotopoulos
Towards Non-Perturbative Lagrangian Field Theory via the Topos of Smooth Sets
- 02:30 - 03:15 pm ● Luigi Alfonsi
Towards Non-Perturbative BV-Theory via Derived Geometry and the Puzzle of Quantisation
- 03:30 - 04:15 pm ● Eric Sharpe
Decomposition of 2D Pure Yang-Mills and the Gross-Taylor String Theory
- 07:00 - 09:00 pm ● Dinner at Beirut Sur Mer

Program (Tuesday, January 16, 2024)

M-theory and Mathematics: Classical and Quantum Aspects

- 09:00 - 09:45 am** ● **Ruben Minasian**
Constraining and Un-constraining Supergravities
- 10:00 - 10:45 am** ● **Emanuel Malek**
Kaluza-Klein Spectrometry for String Theory Compactifications
- 11:00 - 11:45 am** ● **Fei Han**
Cubic Forms, Anomaly Cancellation and Modularity
- 12:00 - 01:15 pm** ● **Lunch Break**
- 01:15 - 02:00 pm** ● **Meng-Chwan Tan**
Topological-Holomorphic N=4 Gauge Theory: From Langlands Duality of Holomorphic Invariants to Mirror Symmetry of Quasi-Topological Strings
- 02:15 - 03:00 pm** ● **Olaf Hohm**
Double Copy, Double Field Theory & Homotopy Algebras
- 03:15 - 04:00 pm** ● **Christian Saemann**
Atiyah Algebroids for Higher and Groupoid Gauge Theories
- 04:15 - 07:15 pm** ● **Visit to Qasr Al Watan**

Program (Wednesday, January 17, 2024)

M-theory and Mathematics: Classical and Quantum Aspects

- 09:00 - 09:45 am** ● **Chris Hull**
Self-Dual p-Form Gauge Fields and the Topology of the Graviton
- 10:00 - 10:45 am** ● **Yang-Hui He**
The AI Mathematician
- 11:00 - 11:45 am** ● **Chris Blair**
Geometry and Dualities of Decoupling Limits in String Theory and M-Theory
- 12:00 - 01:15 pm** ● **Lunch Break**
- 01:15 - 02:00 pm** ● **Hisham Sati**
M-Theory and Hypothesis H
- 02:15 - 03:00 pm** ● **Urs Schreiber**
Introduction to Quantum Hypothesis H