



Solvay workshop

Infrared Physics: Asymptotic & BMS symmetry, soft theorems, memory, information paradox and all that

VENUE: ULB, Campus de la Plaine, Brussels Building N.O. - 5th Floor - SOLVAY ROOM

Program (May 16 - 18, 2018)

WEDNESDAY 16 MAY 2018

- 13:45 - 14:00 Registration
- 14:00 - 15:00 Ashoke Sen: *Soft theorem and its classical limit*
- 15:00 - 16:00 Ellis Yuan: *Scattering Equations and Soft Theorems*
- 16:00 - 16:30** **COFFEE BREAK (in hall adjacent to the Solvay room)**
- 16:30 - 17:30 Christopher White: *The many faces of (next-to) soft physics*
- 17:30 - 18:30 Lionel Mason: *From null geodesic to gravitational scattering: an alternative route from BMS to soft theorems via ambitwistor strings*
- 19:30** **BANQUET (Plaza Hotel, Blvd Adolphe Max 118-126, 1000 Brussels)**

THURSDAY 17 MAY 2018

- 09:00 - 10:00 Paolo Di Vecchia: *Soft Theorems for Massless Particles from Gauge Invariance*
- 10:00 - 11:00 Laurentiu Rodina: *S-Matrix Uniqueness from Soft Theorems*
- 11:00 - 11:30** **COFFEE BREAK (in hall adjacent to the Solvay room)**
- 11:30 - 12:30 Malcolm Perry: *Black Hole Entropy from Soft Hair*
- 12:30 - 12:40** **GROUP PHOTO**
- 12:40 - 14:00** **LUNCH BREAK (at the university's cafeteria)**
- 14:00 - 15:00 Tom Banks: *Currents on the Conformal Boundary and Gravitational Scattering Theory*

- 15:00 – 16:00 Prahar Mitra: *Asymptotic Symmetries and Soft Theorems in Effective Field Theories*
- 16:00 – 16:30 COFFEE BREAK (in hall adjacent to the Solvay room)**
- 16:30 – 17:30 César Gómez: *Physics implications of the IR: A short journey through Von Neumann spaces*
- 17:30 – 18:30 Massimo Porrati: *A few applications of the infrared factorization of IR dynamics*

FRIDAY 18 MAY 2018

- 09:00 – 10:00 Abhay Ashtekar: *The many faces of infrared issues: Some recent developments*
- 10:00 – 11:00 Lydia Bieri: *Gravitational Wave Memory and an Electromagnetic Analog*
- 11:00 – 11:30 COFFEE BREAK (in hall adjacent to the Solvay room)**
- 11:30 – 12:30 Helmut Friedrich: *Hierarchies of asymptotic conditions and results*
- 12:30 – 14:00 LUNCH BREAK (at the university's cafeteria)**
- 14:00 – 15:00 David Garfinkle: *Gravitational wave memory and gauge invariance*
- 15:00 – 16:00 Cédric Troessaert: *The hamiltonian description of BMS₄*
- 16:00 – 16:30 COFFEE BREAK (in hall adjacent to the Solvay room)**
- 16:30 – 17:30 David Nichols: *Gravitational-wave memory effects: Observables and prospects for measurement*
- 17:30 – 18:30 Miguel Campiglia: *Conserved charges at spatial infinity and an infinite set of soft photon theorems*