

Week 3 of the Thematic Programme on
“Carrollian Physics and Holography”

April 15 - 19, 2024

organized by

Andrea Campoleoni (U of Mons), Pedro del Real Lavergne (U of Vienna), Laura Donnay (SISSA, Trieste), Adrien Fiorucci (TU Vienna), Stefan Fredenhagen (U of Vienna), Daniel Grumiller (TU Vienna), Stefan Prohazka (U of Vienna)

• **Monday, April 15th, 2024**

09:00 – 09:30 **Registration**

09:30 – 10:30 **Review talk: Jay Armas (U of Amsterdam)**

Carrollian Fluids and Spontaneously Broken Boosts

10:30 – 11:00 **Discussion**

11:00 – 11:30 **Coffee Break**

11:30 – 12:00 **Aleksander Głódkowski (UST Wroclaw)**

Hydrodynamics with dipole conservation

12:00 – 12:30 **Discussion**

12:30 – 14:30 **Lunch Break**

14:30 – 15:00 **Laurent Freidel (Perimeter Institute, Waterloo)**

Null Raychaudhuri: Canonical structure, Dressing time and Quantum geometry

15:00 – 15:30 **Discussion**

15:30 – 16:00 **Coffee Break**

16:00 – 16:30 **Raphaela Wutte (ASU, Phoenix)**

Hyperbolic Mass in 2+1 Dimensions

16:30 – 17:00 **Discussion**

18:30 – 22:00 **Drinks & Dinner (self-paid)**

at the Stiegl-Ambulanz (<https://maps.app.goo.gl/qwg6dQ6LWLnfSx548>)

• **Tuesday, April 16th, 2024**

09:30 – 10:30 **Review talk: Kristan Jensen (U of Victoria)**

Fractons and quantum theories with exotic symmetry

10:30 – 11:00 **Discussion**

11:00 – 11:30 **Coffee Break**

11:30 – 12:00 **Alfredo Perez (CECS, Valdivia)**

Fracton infrared triangle

12:00 – 12:30 **Discussion**

12:30 – 14:30 **Lunch Break**

14:30 – 15:00 **Erica Bertolini (DIAS, Dublin)**
A covariant approach to fractons: Maxwell theory of fractons
15:00 – 15:30 **Discussion**
15:30 – 16:00 **Coffee Break**

• **Wednesday, April 17th, 2024**

09:30 – 10:00 **Alessio Caddeo (U de Oviedo)**
Fracton gravity from spacetime dipole symmetry
10:00 – 10:30 **Discussion**
10:30 – 11:00 **Coffee Break**
11:00 – 11:30 **Marc Geiller (ENS Lyon)**
Subleading structure of asymptotically-flat spacetimes
11:30 – 12:00 **Discussion**
12:00 – 14:00 **Lunch Break**
14:15 – 15:15 **Leonhard Kehrberger (U of Cambridge)**
The Case Against Smooth Null Infinity and the Persistence of Polyhomogeneity
This talk takes place at Faculty of Physics, Währinger Str. 17, 2nd floor, seminar room A.
15:15 – 15:30 **Coffee Break**
15:30 – 16:00 **Joaquim Gomis (U of Barcelona)**
Interacting Conformal Carroll Particles and Tachyonic Carroll strings
16:00 – 16:30 **Discussion**
19:00 – 00:00 **Conference dinner II (Schübel-Auer)**

• **Thursday, April 18th, 2024**

10:00 – 10:30 **Discussion**
10:30 – 11:00 **Coffee Break**
11:00 – 11:30 **Stephan Stieberger (MPP, Munich)**
Celestial and Carrollian Amplitudes
11:30 – 12:00 **Discussion**
12:00 – 14:00 **Lunch Break**
14:00 – 15:00 **Review talk: Massimo Porrati (NYU, New York)**
Supertranslation invariance and covariance of Lorentz charges
15:00 – 15:30 **Discussion**
15:30 – 16:00 **Coffee Break**
17:00 – 18:00 **Dima Vassilevich (UFABC, Santo André)**
PSM diffeos and holography
This talk takes place at TU Wien, Wiedner Hauptstrasse 8, 10th floor.

- **Friday, April 19th, 2024**

09:30 – 10:00 **Peter Horvathy (U of Tours)**

Memory Effect and Carroll Symmetry for gravitational waves

10:00 – 10:30 **Discussion**

10:30 – 11:00 **Coffee Break**

11:00 – 11:30 **Federico Capone (U of Jena)**

TBA

11:30 – 12:00 **Discussion**

12:00 – 14:00 **Lunch Break**

14:00 – 14:30 **Daniele Pranzetti (U of Udine)**

On the definition of the spin charge in asymptotically-flat spacetimes

14:30 – 15:00 **Discussion**

15:00 – 15:30 **Coffee Break**

All talks take place at Boltzmann Lecture Hall!