

From Philosophical Reflections on Gauge Symmetries to Gauge-Invariant Approaches to (Particle) Physics

July 15-17, 2024

University of Graz, Austria

Organizing Team: Philipp Berghofer, Jordan François André, and Axel Maas

Venue: University of Graz, Merangasse 12, SR 55.01

July 15

09:00-09:30: Introduction

09:30-10:30: **Renate Loll** (Radboud University): TBA

10:30-11:00: Break

11:00-12:00: **Axel Maas** (University of Graz): TBA

12:00-13:30: Lunch

13:30-14:30: **Nicholas Teh** (University of Notre Dame): TBA

14:30-15:00: Break

15:00-16:00: **Ward Struyve** (KU Leuven): *Scope of the action principle*

16:00-17:00: **Alvaro Frauca** (Autonomous University of Barcelona): *In which sense can we say that first-class constraints generate gauge transformations?*

July 16

09:30-10:30: **Jeff Greensite** (San Francisco State University): TBA

10:30-11:00: Break

11:00-12:00: **Reinhard Alkofer** (University of Graz): TBA

12:00-13:00: **Lucrezia Ravera** (Polytechnic University of Turin): *On the meaning of local symmetries: Epistemic-ontological dialectics*

13:00-14:30: Lunch

14:30-15:30: **Duifje van Egmond** (ICTP-SAIFR, São Paulo): TBA

15:30-16:00: Break

16:00-17:00: **Urko Reinos** (École polytechnique): *Gauge symmetry and its non-breaking*

17:00-18:00: **Philipp Höhn** (OIST): TBA

18:30: Conference Dinner

July 17

09:30-10:30: **Henrique Gomes** (University of Oxford): TBA

10:30-11:00: Break

11:00-12:00: **Jordan François André** (University of Graz): *The dressing field method for General Relativistic physics and its relational interpretation*

12:00-13:00: **Bilyana Tomova** (OIST): *Soft edges*

13:00-14:30: Lunch

14:30-15:30: **Michael Stöltzner** (University of South Carolina): TBA

15:30-16:00: Break

16:00-17:00: **Anton Sverdlikov** (University of Wuppertal): *Gauge invariance and event structural realism*

17:00-18:00: **Guy Hetzroni** (Open University of Israel): TBA