

RTG 2522 Kickoff



Report of Contributions

Contribution ID: 1

Type: **not specified**

RTG 2522 Opening

Tuesday, 25 February 2020 10:00 (30 minutes)

Presenter: GIES, Holger (TPI, FSU Jena)

Contribution ID: 2

Type: **not specified**

IMR Consistency Tests on Gravitational Signals from the second observing run of LIGO and Virgo

Tuesday, 25 February 2020 10:30 (30 minutes)

Presenter: BRESCHI, Matteo (TPI Jena)

Contribution ID: 3

Type: **not specified**

Poor foundations of a heated debate; semi-classical black hole evaporation

Tuesday, 25 February 2020 11:30 (30 minutes)

Back in the 70s Stephen Hawking suggested from semi-classical gravity arguments (i.e. coupling classical general relativity to a quantum field theory as a matter model) that black holes can evaporate in a way which leads to non-reversible time evolution. This suggestion has proved to be controversial, especially among those working in quantum gravity. As such, this scenario is often referred to as the information loss paradox. We note that the semi-classical foundations on which this paradox is built, are still poorly understood. In this talk I will highlight some open questions concerning semi-classical black hole evaporation. Hopefully this will allow us to settle if black holes truly evaporate within the semi-classical theory, such that we can finally address potential implications of this on quantum gravity theories from firmer ground, whilst expanding our understanding of quantum fields on curved space-times and semi-classical gravity in the process.

Presenter: JANSSEN, Daan (ITP Leipzig)

Contribution ID: 4

Type: **not specified**

Adaptive Mesh Refinement for Gravitational Wave Collapse

Tuesday, 25 February 2020 12:00 (30 minutes)

Presenter: RENKHOFF, Sarah (TPI Jena)

Contribution ID: 5

Type: **not specified**

Lecture: The Operator Product Expansion as a structural property of Quantum Field Theories

Tuesday, 25 February 2020 14:30 (1 hour)

Presenter: FRÖB, Markus

Contribution ID: 6

Type: **not specified**

Key note talk:String-localized QED

Tuesday, 25 February 2020 16:30 (1h 30m)

Presenter: REHREN, Karl-Henning (Göttingen U)

Contribution ID: 7

Type: **not specified**

Glancing at energy inequalities in integrable quantum field theories

Tuesday, 25 February 2020 18:00 (30 minutes)

Presenter: MANDRYSCH, Jan (ITP Leipzig)

Contribution ID: 8

Type: **not specified**

Board/Fellow Meeting

Tuesday, 25 February 2020 20:00 (30 minutes)

Contribution ID: 9

Type: **not specified**

Key note talk: The Weyl anomaly and some of its uses

Wednesday, 26 February 2020 09:00 (1h 30m)

Presenter: THEISEN, Stefan (AEI Potsdam)

Contribution ID: **10**

Type: **not specified**

Project talk

Contribution ID: 11

Type: **not specified**

Lecture: Introduction to spin foams and background independent renormalization

Wednesday, 26 February 2020 11:00 (1 hour)

Presenter: STEINHAUS, Sebastian (TPI, FSU Jena)

Contribution ID: 12

Type: **not specified**

Asymptotically safe QED

Wednesday, 26 February 2020 12:00 (30 minutes)

Presenter: ZIEBELL, Jobst (TPI Jena)

Contribution ID: 13

Type: **not specified**

Transmission Amplitude through a Coulomb-blockaded Majorana Wire

Wednesday, 26 February 2020 14:30 (30 minutes)

Presenter: THAMM, Matthias (ITP Leipzig)

Contribution ID: 14

Type: **not specified**

A New Phase Transition and Chiral Symmetry in 1+2D Thirring Models

Wednesday, 26 February 2020 15:00 (30 minutes)

Presenter: LENZ, Julian (TPI Jena)

Contribution ID: 15

Type: **not specified**

Hydrodynamics, Spontaneously Broken Symmetries, Holography, and New Results

Wednesday, 26 February 2020 15:30 (30 minutes)

Presenter: GRAY, Sean (TPI Jena)

Contribution ID: 16

Type: **not specified**

Quantum Corrections to the Thermal Nature of Black Holes

Tuesday, 25 February 2020 15:30 (30 minutes)

Presenter: WÖLFL, Katharina (TPI Jena)