

Physik-Combo



Report of Contributions

Contribution ID: 1

Type: **not specified**

Opening address

Monday, 21 September 2020 12:00 (15 minutes)

Presenter: HOLLANDS, Stefan (Leipzig)

Contribution ID: 2

Type: **not specified**

Quantum fields inside black holes

Monday, 21 September 2020 12:15 (30 minutes)

Presenter: KLEIN, Christiane (Leipzig)

Contribution ID: 3

Type: **not specified**

Applications of asymptotic safety

Monday, 21 September 2020 13:00 (1h 30m)

Presenter: EICHHORN, Astrid (Odense)

Contribution ID: 4

Type: **not specified**

Lecture Q&A

Monday, 21 September 2020 14:30 (15 minutes)

Contribution ID: 5

Type: **not specified**

Black hole physics

Monday, 21 September 2020 15:00 (1h 30m)

Presenter: CARDOSO, Vitor (Lisbon)

Contribution ID: 6

Type: **not specified**

Lecture Q&A

Monday, 21 September 2020 16:30 (15 minutes)

Contribution ID: 7

Type: **not specified**

Quantum Information Theory

Monday, 21 September 2020 17:15 (1h 30m)

Presenter: WILDE, Mark (Baton Rouge)

Contribution ID: 8

Type: **not specified**

Lecture Q&A

Monday, 21 September 2020 18:45 (15 minutes)

Contribution ID: 9

Type: **not specified**

Flat-Space Higher-Spin Gravity in 2+1 Dimensions

Tuesday, 22 September 2020 12:45 (30 minutes)

Presenter: PANNIER, Michel (Jena)

Contribution ID: 10

Type: **not specified**

Unfaithfulness of tidal gravitational-wave approximants and equation of state constraints from binary neutron star signals

Tuesday, 22 September 2020 13:15 (30 minutes)

Gravitational-wave signals from binary neutron star coalescences carry information about the star's equation of state in their tidal signatures. A major issue in the inference of the tidal parameters (or directly of the equation of state) is the systematic error introduced by waveform approximants. In this talk I will discuss their impact on the loud, high signal to noise ratio events that will be observed by advanced and third generation detectors, and show how current state of the art waveform models are insufficient to unequivocally infer equation of state constraints from GW PE.

Presenter: GAMBA, Rossella (Jena)

Contribution ID: 11

Type: **not specified**

Black hole physics

Tuesday, 22 September 2020 14:00 (1h 30m)

Presenter: CARDOSO, Vitor (Lisbon)

Contribution ID: 12

Type: **not specified**

Lecture Q&A

Tuesday, 22 September 2020 15:30 (15 minutes)

Contribution ID: 13

Type: **not specified**

Loop Quantum Gravity: Basics and Recent Advances

Tuesday, 22 September 2020 16:00 (1h 30m)

Presenter: ASHTEKAR, Abhay (Penn State)

Contribution ID: 14

Type: **not specified**

Lecture Q&A

Tuesday, 22 September 2020 17:30 (15 minutes)

Contribution ID: 15

Type: **not specified**

Quantum Information Theory

Tuesday, 22 September 2020 18:15 (1h 30m)

Presenter: WILDE, Mark (Baton Rouge)

Contribution ID: **16**

Type: **not specified**

Lecture Q&A

Tuesday, 22 September 2020 19:45 (15 minutes)

Contribution ID: 17

Type: **not specified**

A twisted approach to supersymmetric Yang-Mills theory on the lattice

Wednesday, 23 September 2020 12:00 (30 minutes)

Presenter: STEINHAUSER, Marc (Jena)

Contribution ID: 18

Type: **not specified**

Towards a manifestly supersymmetric formulation of loop quantum supergravity

Wednesday, 23 September 2020 12:30 (30 minutes)

We study the idea to quantize supergravity in the framework of loop quantum gravity in a way such that the resulting theory still reflects, at least partially, the underlying supersymmetry. Therefore, following the approach of D'Aurea and Fre, we consider supergravity as super Cartan geometry and derive a super analog of Ashtekar's connection. This sets the stage for a quantisation of the theory that might lead to a unified description of both, gravity and matter degrees of freedom. We will then apply this approach to symmetry reduced models and will then see that this leads in a very elegant way to a quantum theory in accordance with the standard state space of loop quantum cosmology in presence of fermionic matter fields.

Presenter: EDER, Konstantin (Erlangen)

Contribution ID: 19

Type: **not specified**

Curvature Bound from Gravitational Catalysis in a thermal background

Wednesday, 23 September 2020 13:00 (30 minutes)

Presenter: SALEK, Abdol Sabor (Jena)

Contribution ID: 20

Type: **not specified**

Applications of asymptotic safety

Wednesday, 23 September 2020 14:00 (1h 30m)

Presenter: EICHHORN, Astrid (Odense)

Contribution ID: 21

Type: **not specified**

Lecture Q&A

Wednesday, 23 September 2020 15:30 (15 minutes)

Contribution ID: 22

Type: **not specified**

Big Bang, Black Holes and Gravitational Waves: Examples of Paradigm Shifts in Fundamental Science

Wednesday, 23 September 2020 16:15 (1h 30m)

Presenter: ASHTEKAR, Abhay (Penn State)

Contribution ID: 23

Type: **not specified**

Lecture Q&A

Wednesday, 23 September 2020 17:45 (15 minutes)

Contribution ID: 24

Type: **not specified**

GrK Student Meeting

Wednesday, 23 September 2020 18:15 (30 minutes)

Contribution ID: 25

Type: **not specified**

GrK PI Meeting

Wednesday, 23 September 2020 18:15 (30 minutes)