

**CERN Winter School on
Supergravity, Strings and
Gauge Theory 2019**

Report of Contributions

Contribution ID: 1

Type: **not specified**

CFT in Lorentzian Signature 1

Monday 4 February 2019 09:30 (1 hour)

Presenter: SIMMONS-DUFFIN, David (IAS)

Contribution ID: 2

Type: **not specified**

Constraints on Quantum Gravity 1

Monday 4 February 2019 11:00 (1 hour)

Presenter: OOGURI, Hirosi

Contribution ID: 3

Type: **not specified**

Constraints on Quantum Gravity 2

Monday 4 February 2019 12:00 (1 hour)

Presenter: OOGURI, Hirosi

Contribution ID: 4

Type: **not specified**

Geometric Engineering - Four Ways 1

Monday 4 February 2019 14:30 (1 hour)

Presenter: SCHAFER-NAMEKI, Sakura (Caltech)

Contribution ID: 5

Type: **not specified**

Geometric Engineering - Four Ways 2

Monday 4 February 2019 15:30 (1 hour)

Presenter: SCHAFER-NAMEKI, Sakura (Caltech)

Contribution ID: 6

Type: **not specified**

Discussion

Monday 4 February 2019 17:00 (1 hour)

Contribution ID: 7

Type: **not specified**

Geometric Engineering - Four ways 3

Tuesday 5 February 2019 09:30 (1 hour)

Presenter: SCHAFER-NAMEKI, Sakura (Caltech)

Contribution ID: 8

Type: **not specified**

CFT in Lorentzian Signature 2

Tuesday 5 February 2019 11:00 (1 hour)

Presenter: SIMMONS-DUFFIN, David (IAS)

Contribution ID: 9

Type: **not specified**

CFT in Lorentzian Signature 3

Tuesday 5 February 2019 12:00 (1 hour)

Presenter: SIMMONS-DUFFIN, David (IAS)

Contribution ID: **10**

Type: **not specified**

Geometric Engineering - Four ways 4

Tuesday 5 February 2019 14:30 (1 hour)

Presenter: SCHAFER-NAMEKI, Sakura (Caltech)

Contribution ID: 11

Type: **not specified**

Constraints on Quantum Gravity 3

Tuesday 5 February 2019 15:30 (1 hour)

Presenter: OOGURI, Hirosi

Contribution ID: 12

Type: **not specified**

Discussion

Tuesday 5 February 2019 17:00 (1 hour)

Contribution ID: 13

Type: **not specified**

Positive Geometry of Effective Field Theory 1

Wednesday 6 February 2019 09:30 (1 hour)

Presenter: ARKANI-HAMED, Nima (IAS)

Contribution ID: 14

Type: **not specified**

Positive Geometry of Effective Field Theory 2

Wednesday 6 February 2019 10:30 (1 hour)

Presenter: ARKANI-HAMED, Nima (IAS)

Contribution ID: 15

Type: **not specified**

Colloquium - "Black Holes, Quantum Information, and Unification"

Wednesday 6 February 2019 12:00 (1 hour)

The study of black holes has revealed a deep connection between quantum information and space-time geometry. Precise formulations of this conjectural relation have recently led to new insights in Quantum Field Theory. An important example is the QNEC, a lower bound on the local energy density in terms of the flow of nonlocal information. These results pertain to an unexplored, but accessible regime of the Standard Model: quantum coherent, relativistic, and low energy. They are most easily understood as implications of specific conjectures about quantum gravity, so their experimental tests at low energies would probe our hypotheses about unification at the highest energy scales.

Presenter: Prof. BOUSSO, Raphael (UC Berkeley)

Contribution ID: 16

Type: **not specified**

Constraints on Quantum Gravity 4

Thursday 7 February 2019 09:30 (1 hour)

Presenter: OOGURI, Hirosi

Contribution ID: 17

Type: **not specified**

Positive Geometry of Effective Field Theory 3

Thursday 7 February 2019 11:00 (1 hour)

Presenter: ARKANI-HAMED, Nima (IAS)

Contribution ID: 18

Type: **not specified**

Positive Geometry of Effective Field Theory 4

Thursday 7 February 2019 12:00 (1 hour)

Presenter: ARKANI-HAMED, Nima (IAS)

Contribution ID: 19

Type: **not specified**

Quantum information aspects of Quantum Fields and Gravity 1

Thursday 7 February 2019 14:30 (1 hour)

Presenter: FAULKNER, Thomas

Contribution ID: 20

Type: **not specified**

Quantum information aspects of Quantum Fields and Gravity 2

Thursday 7 February 2019 15:30 (1 hour)

Presenter: FAULKNER, Thomas

Contribution ID: 21

Type: **not specified**

Discussion

Thursday 7 February 2019 17:00 (1 hour)

Contribution ID: 22

Type: **not specified**

CFT in Lorentzian Signature 4

Friday 8 February 2019 09:30 (1 hour)

Presenter: SIMMONS-DUFFIN, David (IAS)

Contribution ID: 23

Type: **not specified**

Quantum information aspects of Quantum Fields and Gravity 3

Friday 8 February 2019 11:00 (1 hour)

Presenter: FAULKNER, Thomas

Contribution ID: 24

Type: **not specified**

Quantum information aspects of Quantum Fields and Gravity 4

Friday 8 February 2019 12:00 (1 hour)

Presenter: FAULKNER, Thomas

Contribution ID: 25

Type: **not specified**

Before, Behind, and Beyond the Standard Model

Friday 8 February 2019 14:30 (1 hour)

Presenter: WULZER, Andrea (CERN)

Contribution ID: 26

Type: **not specified**

CFT in Lorentzian Signature 5

Friday 8 February 2019 15:30 (1 hour)

Presenter: SIMMONS-DUFFIN, David (IAS)

Contribution ID: 27

Type: **not specified**

School dinner

Tuesday 5 February 2019 18:30 (1 hour)