

**Nuclear Physics Meets
Condensed Matter: Symmetry,
Topology, and Gauge**

Report of Contributions

Contribution ID: 1

Type: **not specified**

Welcome ECT* Director Gert Aarts

Monday, 19 July 2021 15:00 (5 minutes)

Contribution ID: 2

Type: **not specified**

Neutron star mergers as materials science

Monday, 19 July 2021 15:05 (30 minutes)

Presenter: ALFORD, Mark

Contribution ID: 3

Type: **not specified**

Structure and Response in Nuclear and Cold Atom Physics

Monday, 19 July 2021 15:35 (30 minutes)

Presenter: CARLSON, Joe

Contribution ID: 4

Type: **not specified**

Quantum geometry in superconductivity, Bose-Einstein condensation, and light-matter interactions

Monday, 19 July 2021 16:05 (30 minutes)

Presenter: TÖRMÄ , Päivi

Contribution ID: 5

Type: **not specified**

Quantum simulation of gauge theories: from Abelian to non-Abelian

Monday, 19 July 2021 16:50 (30 minutes)

Presenter: DALMONTE, Marcello

Contribution ID: 6

Type: **not specified**

Topology with ultracold atoms in hexagonal optical lattices

Monday, 19 July 2021 17:20 (30 minutes)

Presenter: ASTERIA, Luca

Contribution ID: 7

Type: **not specified**

Quantum field theories with trapped-ion quantum simulators?

Monday, 19 July 2021 17:50 (30 minutes)

Presenter: DAVOUDI, Zohreh

Contribution ID: **8**

Type: **not specified**

DISCUSSION

Monday, 19 July 2021 18:20 (30 minutes)

Contribution ID: 9

Type: **not specified**

Nambu-covariant many-body theory: a Green's function framework for symmetry-broken systems

Tuesday, 20 July 2021 15:00 (30 minutes)

Presenter: RIOS, Arnau

Contribution ID: **10**

Type: **not specified**

Two-dimensional supersolidity in a dipolar quantum gas

Tuesday, 20 July 2021 15:30 (30 minutes)

Presenter: FERLAINO, Francesca

Contribution ID: 11

Type: **not specified**

Imaginary Time Propagation on a Quantum Chip

Tuesday, 20 July 2021 16:00 (30 minutes)

Presenter: PEDERIVA, Francesco

Contribution ID: 12

Type: **not specified**

Toward high-order virial coefficients via automated algebra

Tuesday, 20 July 2021 16:45 (30 minutes)

Presenter: DRUT, Joaquin

Contribution ID: 13

Type: **not specified**

Probing the helium dimer and trimer with fast, intense lasers

Tuesday, 20 July 2021 17:15 (30 minutes)

Presenter: BLUME, Doerte

Contribution ID: 14

Type: **not specified**

Quantum Hall fluids of atoms and of light

Tuesday, 20 July 2021 17:45 (30 minutes)

Presenter: CARUSOTTO, Iacopo

Contribution ID: 15

Type: **not specified**

DISCUSSION

Tuesday, 20 July 2021 18:15 (30 minutes)

Contribution ID: 16

Type: **not specified**

Fractional quantum Hall effect in a relativistic quantum field theory.

Wednesday, 21 July 2021 15:00 (30 minutes)

Presenter: SEN, Srimoyee

Contribution ID: 17

Type: **not specified**

Rotations of odd-mass nuclei: magnetic monopoles and Berry phases

Wednesday, 21 July 2021 15:30 (30 minutes)

Presenter: PAPENBROCK, Thomas

Contribution ID: **18**

Type: **not specified**

Un-nuclear physics

Wednesday, 21 July 2021 16:00 (30 minutes)

Presenter: HAMMER, Hans-Werner

Contribution ID: 19

Type: **not specified**

Discrete gauge fields coupled to fermion matter: topological order, confinement and fractons

Wednesday, 21 July 2021 16:45 (30 minutes)

Presenter: MOROZ, Sergej

Contribution ID: 20

Type: **not specified**

Solitonic excitations in heavy ion collisions and ultracold atoms

Wednesday, 21 July 2021 17:15 (30 minutes)

Presenter: MAGIERSKI, Piotr

Contribution ID: **21**

Type: **not specified**

DISCUSSION

Wednesday, 21 July 2021 17:45 (30 minutes)