## 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

DISCUSSION

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

DISCUSSION

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

DISCUSSION

Contribution ID: 21 Type: not specified

### **DISCUSSION**

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