

# **From Quarks and Gluons to Nuclear Forces and Structure**



## **Report of Contributions**

Contribution ID: **1**

Type: **not specified**

## Registration

*Monday 15 July 2019 08:15 (1h 15m)*

Contribution ID: 2

Type: **not specified**

## Introduction and Welcome

*Tuesday 16 July 2019 08:45 (15 minutes)*

**Presenter:** SHINDLER, Andrea

Contribution ID: 3

Type: **not specified**

# Introduction to the Path Integral

*Monday 15 July 2019 09:30 (1h 30m)*

**Presenter:** LUU, Thomas

Contribution ID: 4

Type: **not specified**

## QFT in a finite volume I

*Monday 15 July 2019 11:30 (1h 30m)*

**Presenter:** DAVOUDI, Zohreh

Contribution ID: 5

Type: **not specified**

## Exercises

*Monday 15 July 2019 14:30 (3h 30m)*

Contribution ID: 6

Type: **not specified**

# Lattice Gauge Theory I

*Tuesday 16 July 2019 11:00 (1h 30m)*

**Presenter:** LUU, Thomas

Contribution ID: 7

Type: **not specified**

## Introduction to Lattice QCD

*Tuesday 16 July 2019 09:00 (1h 30m)*

**Presenter:** SHINDLER, Andrea



Contribution ID: 8

Type: **not specified**

## Exercises

*Tuesday 16 July 2019 14:30 (3h 30m)*

Contribution ID: 9

Type: **not specified**

# Lattice Gauge Theory II

*Wednesday 17 July 2019 09:15 (1h 30m)*

**Presenter:** SHINDLER, Andrea

Contribution ID: **10**

Type: **not specified**

## **QFT in a finite volume II**

*Wednesday 17 July 2019 11:15 (1h 30m)*

**Presenter:** DAVOUDI, Zohreh

Contribution ID: **11**

Type: **not specified**

## Exercises

*Wednesday 17 July 2019 14:30 (3h 30m)*

Contribution ID: **12**

Type: **not specified**

## Data Analysis

*Thursday 18 July 2019 09:15 (1h 30m)*

**Presenter:** LUU, Thomas

Contribution ID: 13

Type: **not specified**

## QFT in a Finite Volume III

*Thursday 18 July 2019 11:15 (1h 30m)*

**Presenter:** DAVOUDI, Zohreh

Contribution ID: **14**

Type: **not specified**

## Exercises

*Thursday 18 July 2019 14:30 (3h 30m)*

Contribution ID: 15

Type: **not specified**

# Fermions on the Lattice I

*Friday 19 July 2019 09:15 (1h 30m)*

**Presenter:** SHINDLER, Andrea



Contribution ID: **16**

Type: **not specified**

## **Fermions on the Lattice II**

*Friday 19 July 2019 11:15 (1h 30m)*

**Presenter:** LUU, Thomas

Contribution ID: 17

Type: **not specified**

## Exercises

*Friday 19 July 2019 14:30 (3h 30m)*

Contribution ID: **18**

Type: **not specified**

# Hadron Spectroscopy

*Monday 22 July 2019 09:15 (1h 30m)*

**Presenter:** SHINDLER, Andrea

Contribution ID: **19**

Type: **not specified**

# Hybrid Monte Carlo I

*Monday 22 July 2019 11:15 (1h 30m)*

**Presenter:** LUU, Thomas

Contribution ID: **20**

Type: **not specified**

## Exercises

*Monday 22 July 2019 14:30 (3h 30m)*

Contribution ID: 21

Type: **not specified**

## Chiral symmetry and Ward Identities

*Tuesday 23 July 2019 09:15 (1h 30m)*

**Presenter:** SHINDLER, Andrea

Contribution ID: 22

Type: **not specified**

## Hybrid Monte Carlo II

*Tuesday 23 July 2019 11:15 (1h 30m)*

**Presenter:** LUU, Thomas

Contribution ID: 23

Type: **not specified**

## Exercises

*Tuesday 23 July 2019 14:30 (3h 30m)*



Contribution ID: 24

Type: **not specified**

## Advanced Lattice QCD

*Wednesday 24 July 2019 09:15 (1h 30m)*

**Presenter:** SHINDLER, Andrea

Contribution ID: 25

Type: **not specified**

# Chiral Perturbation Theory in a Nutshell

*Wednesday 24 July 2019 11:15 (1h 30m)*

**Presenter:** EPELBAUM, Evgeny

Contribution ID: 26

Type: **not specified**

## Exercises

*Wednesday 24 July 2019 14:30 (3h 30m)*

Contribution ID: 27

Type: **not specified**

## Non-Relativistic Fermions

*Thursday 25 July 2019 09:15 (1h 30m)*

**Presenter:** LEE, Dean

Contribution ID: 28

Type: **not specified**

## Two-Nucleon Scattering: Pionless EFT

*Thursday 25 July 2019 11:15 (1h 30m)*

**Presenter:** EPELBAUM, Evgeny

Contribution ID: **29**

Type: **not specified**

## Exercises

*Thursday 25 July 2019 14:30 (3h 30m)*

Contribution ID: **30**

Type: **not specified**

## Auxiliary Fields

*Friday 26 July 2019 09:15 (1h 30m)*

**Presenter:** LEE, Dean

Contribution ID: **31**

Type: **not specified**

## **Two-Nucleon Scattering: Inclusion of Pions**

*Friday 26 July 2019 11:15 (1h 30m)*

**Presenter:** EPELBAUM , Evgeny



Contribution ID: **32**

Type: **not specified**

## Exercises

*Friday 26 July 2019 14:30 (3h 30m)*

Contribution ID: 33

Type: **not specified**

## Spherical Wall Method

*Monday 29 July 2019 09:15 (1h 30m)*

**Presenter:** LEE, Dean

Contribution ID: 34

Type: **not specified**

## **Lattice QCD and multi- nucleon physics I**

*Monday 29 July 2019 11:15 (1h 30m)*

**Presenter:** DAVOUDI, Zohreh

Contribution ID: 35

Type: **not specified**

## Exercises

*Monday 29 July 2019 14:30 (3h 30m)*

Contribution ID: 36

Type: **not specified**

## Lattice Simulations of Ultracold Atoms

*Tuesday 30 July 2019 09:15 (1h 30m)*

**Presenter:** LEE, Dean

Contribution ID: 37

Type: **not specified**

## **Nuclear Forces/Currents in Chiral EFT**

*Tuesday 30 July 2019 11:15 (1h 30m)*

**Presenter:** EPELBAUM, Evgeny

Contribution ID: **38**

Type: **not specified**

## Exercises

*Tuesday 30 July 2019 14:30 (3h 30m)*

Contribution ID: 39

Type: **not specified**

## Chiral EFT on the Lattice

*Wednesday 31 July 2019 09:15 (1h 30m)*

**Presenter:** LEE, Dean



Contribution ID: 40

Type: **not specified**

## **Lattice QCD and multi- nucleon physics II**

*Wednesday 31 July 2019 11:15 (1h 30m)*

**Presenter:** DAVOUDI, Zohreh

Contribution ID: **41**

Type: **not specified**

## Exercises

*Wednesday 31 July 2019 14:30 (3h 30m)*

Contribution ID: 42

Type: **not specified**

# Adiabatic Projection Method and Pinhole Algorithm

*Thursday 1 August 2019 09:15 (1h 30m)*

**Presenter:** LEE, Dean

Contribution ID: 43

Type: **not specified**

## **Lattice QCD and multi- nucleon physics III**

*Thursday 1 August 2019 11:15 (1h 30m)*

**Presenter:** DAVOUDI, Zohreh

Contribution ID: 44

Type: **not specified**

## Exercises

*Thursday 1 August 2019 14:30 (3h 30m)*

Contribution ID: 45

Type: **not specified**

# Eigenvector Continuation, Unitary Limit, and Superfluidity

*Friday 2 August 2019 09:15 (1h 30m)*

**Presenter:** LEE, Dean

Contribution ID: 46

Type: **not specified**

## **Special Lecture: "The World of Lattice Nuclei: a Bridge Between LQCD and Non- Relativistic Nuclear Physics"**

*Friday 2 August 2019 11:15 (1h 30m)*

**Presenter:** PEDERIVA, Francesco

Contribution ID: 47

Type: **not specified**

## Exercises and Closing Remarks

*Friday 2 August 2019 14:30 (3h 30m)*