

Session Program

25-29 Jul 2022



27th International Symposium on Particles, Strings and Cosmology

Parallel Session C

Max Planck Institute for Nuclear Physics, Heidelberg, Germany
Saupfercheckweg 1 69117 Heidelberg Germany

Monday 25 July

14:00

Parallel Session C: BSM

Session | **Location:** Lindner Seminar Room | **Convener:** Daniele Teresi

14:00–14:18 **Applying AdS/QCD methods to composite Higgs models**

Speaker

Yang Liu

14:18–14:36 **Minimal SU(6) Gauge-Higgs Grand Unification**

Speaker

Dr Andrei Angelescu

14:36–14:54

Evolution of coupling constants in SU(6) Gauge-Higgs Grand Unification

Speaker

Sascha Weber

14:54–15:12 **Technically Natural Higgs from Planck Scale**

Speaker

Martin Rosenlyst Jørgensen

15:12–15:30

Z_2 Non-Restoration and Composite Higgs: Singlet-Assisted Baryogenesis w/o Topological Defects

Speaker

Aika Marie Tada

15:30

16:00

Parallel Session C: BSM

Session | **Location:** Lindner Seminar Room | **Convener:** Andreas Trautner

16:00–16:18

Using proton bremsstrahlung to explore light new physics: dark vectors, scalars, axions, neutrinos and millicharged particles

Speaker

Saeid Foroughi-Abari

16:18–16:36

Seesaw vector-like leptons for μ on $g - 2$, W boson mass, and dark matter

Speaker

Dr Kimiko Yamashita

16:36–16:54

Oblique S and T parameters at one-loop level and heavy resonances

Speaker

Ignasi Rosell

16:54–17:12

The inverse seesaw family: Dirac and Majorana

Speaker

Salvador Centelles Chuliá

17:12-17:30

GW waves and the triple Higgs boson coupling in the 2HDM

Speaker

Maria Olalla Olea Romacho

17:50

Tuesday 26 July

11:00

Parallel Session C: Formal QFT

Session | **Location:** Lindner Seminar Room | **Convener:** Gauthier Durieux

11:00–11:18 **Reconstruction of UV graviton amplitude from IR singularities**

Speaker

Anna Tokareva

11:18–11:36

The Asymptotically Safe Standard Model: From quantum gravity to dynamical chiral symmetry breaking

Speaker

Mr Alvaro Pastor Gutierrez

11:36–11:54

QED nuclear medium effects in neutrino-nucleus and electron-nucleus scattering

Speaker

Oleksandr Tomalak

11:54–12:12

Adiabatic renormalization with an IR cut-off

Speaker

Pietro Conzino

12:30

14:00

Parallel Session C: BSM

Session | **Location:** Lindner Seminar Room | **Convener:** Florian Goertz

14:00–14:18 **Mapping the parameter space of low-scale leptogenesis**

Speaker

Juraj Klarić

14:18–14:36

Type II Seesaw Leptogenesis

Speaker

Neil Barrie

14:36–14:54

Electroweak Baryogenesis and Dark Matter with an Inert Doublet

Speaker

Sven Fabian

14:54–15:12

Domain walls seeding the electroweak phase transition in the singlet-scalar extension of the SM

Speaker

Simone Blasi

15:30

16:00

Parallel Session C: BSM

Session | **Location:** Lindner Seminar Room | **Convener:** Robert Ziegler

16:00–16:18

Gegenbauer's Twin

Speaker

Gauthier Durieux

16:18-16:36 **Yukawa ratios and nucleon decay fingerprints in SU(5) GUTs**

Speaker

Kevin Hinze

16:36-16:54 **$SU(10)$: a Case for Hadron Colliders**

Speaker

Michael Zantedeschi

16:54-17:12 **More on Fake GUT**

Speaker

Keiichi WATANABE

17:12-17:30

Parker Bound and Monopole Production from Primordial Magnetic Fields

Speaker

Daniele Perri

17:30

Wednesday 27 July

11:00

Parallel Session C: Formal QFT

Session | **Location:** Lindner Seminar Room | **Convener:** Michele Cicoli

11:00-11:15

How special are black holes? Correspondence with objects saturating unitarity bounds in generic theories

Speaker

Juan Sebastián Valbuena Bermúdez

11:15-11:30

Black Hole-Saturn Correspondence

Speaker

Juan Valbuena-Bermudez

11:30-11:48

Multi-Field Oscillons

Speaker

Fabio van Dissel

11:48-12:06

Background Field Method and Initial-Time Singularity for Coherent States

Speaker

Giordano Cintia

12:06-12:24

Kink-antikink scattering in a quantum vacuum

Speaker

George Zahariade

12:24-12:42

One-loop Matching for Perturbative Unitary Theories

Speaker

Martin Gorbahn

12:42-13:00

Vortices in Black Holes

Speaker

Michael Zantedeschi

13:00