

## CONFERENCE PROGRAMME

Monday, 18 September 2024

9:05 — 13:00 Morning session

9:05 — Biswajit Karmakar, Janusz Gluza, *MTTD 2023 — opening*9:15 — Zoltan Trocsanyi, *Status of the superweak extension of the Standard Model (and g-2)*10:00 — Gabor Somogyi, *Exact quark mass corrections to Higgs + jet production at the LHC*11:00 — Krzysztof Kutak, *Maximally entangled proton and entropy in high energy collisions*11:30 — Sebastian Jaśkiewicz, *Perspectives on precision predictions: lightcone expansion beyond NLP*12:00 — Lisong Chen, *GRIFFIN: A C++ library for EW radiative correction in fermion scattering and decay processes*

Morning sessions final discussion

15:30 — 18:30 Afternoon session

15:30 — Wiesław Płaczek, *Gamma Factory at CERN — status and perspectives*16:00 — Sahabub Jahedi, *Estimation of New Physics at  $e^+e^-$  collider using optimal observable technique*16:25 — James Whitehead, *KrkNLO parton shower matching*17:20 — Roger Balsach, *Soft photon emission and LBK theorem*17:40 — Petr Baron, *Novel approach to measure quark/gluon jets at the LHC*18:00 — Pratixan Sarmah, *Tuning Herwig7 with Lund String Model*

Afternoon sessions final discussion

Tuesday, 19 September 2024

9:00 — 13:00 Morning session

9:00 — German Rodrigo, *Quantum algorithms in particle physics*9:30 — Priyanka Lamba, *Quantum information and CP measurement in  $H \rightarrow \tau^+\tau^-$  at future lepton colliders*10:00 — Andrzej Sióderek, *Construction and Fitting of a Deep Generative Hadronization Model — How to build it and fit it to the data?*11:00 — Suchita Kulkarni, *Heavy neutral leptons: prospects at HL-LHC and FCC-ee*11:30 — Zoltán Péli, *Precise prediction for the W-boson mass in U(1) extensions of the Standard Model*12:00 — Stefan Weinzierl, *Recent developments from Feynman integrals*

Morning sessions final discussion

15:30 — 18:30 Afternoon session

15:30 — Monojit Ghosh, *Present status and future prospects of neutrino oscillation experiments*

16:00 — Evgeny Akhmedov, *Damping of neutrino oscillations and decoherence in reactor and radioactive source experiments*

17:00 — Grzegorz Żarnecki, *T2K latest results*

17:30 — Joris Vergeest, *3HDM lepton flavor symmetry of multidimensional mass matrices*

Afternoon sessions final discussion

Wednesday, 20 September 2024

9:00 — 13:00 Morning session

9:00 — Richard Ruiz, *New probes of LNV (and LFV) at the LHC*

9:30 — Biswajit Karmakar, *Phenomenology of discrete flavor symmetries*

10:00 — Dibyakrupa Sahoo, *Probing CP violation in Higgs  $\rightarrow \tau^+ \tau^- \gamma$*

11:00 — Claudia Hagedorn, *Phenomenology of flavor (and CP) symmetries*

11:30 — Maciej Skrzypek, *How well could we calculate luminosity at FCCee?*

12:00 — Aleksander Kusina, *Towards new release of nCTEQ nuclear PDFs*  
Morning sessions final discussion

15:15 — 18:30 Afternoon session

15:15 — Arunansu Sil, *Imprint of Neutrino Seesaw on FIMP DM and Baryon Asymmetry*

16:45 — Debasish Borah, *Baryon asymmetry from dark matter decay*

16:15 — Ilona Bednarek, *The neutron star crust–core transition environment in terms of the symmetry energy*

17:10 — Upalaparna Banerjee, *Recent advances in phenomenology with effective field theory*

17:35 — Simonas Draukšas, *Relations between basis sets of fields in the renormalization procedure*

18:00 — Vytautas Dudenas, *Lepton flavor violating decays in the Grimus–Neufeld model*

Afternoon sessions final discussion

Thursday, 21 September 2024

9:00 — 12:45 Morning session

9:00 — Wojciech Flieger, *Deformed Amplituhedron*

9:30 — Samuel Friot, *Geometrical approaches to the analytic evaluation of multiple Mellin–Barnes integrals*

10:00 — Souvik Bera, *Series expansion of multivariate hypergeometric series about its parameter*

11:00 — Ievgen Dubovyk, *Precision tools for future colliders*

11:30 — Oleksandr Zenaiev, *Compatibility between theoretical predictions and experimental data for top–antitop hadroproduction at NNLO QCD accuracy*

12:00 — Grzegorz Ziarko, *NLO hybrid  $k_T$ -factorization*

Morning session final discussion

Friday, 22 September 2024

9:00 — 12:00 Morning session

- 9:00 — Johann Usovitsch, *Third order corrections to semileptonic  $b \rightarrow u$  decay: fermionic contributions*
- 9:30 — Karol Kołodziej, *PSGen, a generator of phase space parameterizations for the multichannel Monte Carlo integration*
- 10:00 — Károly Seller, *Real effective potentials for phase transitions in models with extended scalar sectors*
- 10:50 — Frank Deppisch, *Probing New Physics with Double Beta*
- 11:20 — Yannis Georis, *Recent developments in testable leptogenesis*
- 11:50 — Morning session final discussion and closing by Bartosz Dziewit and Biswajit Karmakar