Research output list

Journal articles

- T. Gorda, A. Kurkela, J. Österman, R. Paatelainen, S. Säppi, P. Schicho, K. Seppänen, and A. Vuorinen, Soft photon propagation in a hot and dense medium to next-to-leading order, (2022), [2204.11279].
- [15] P. Schicho, T. V. I. Tenkanen, and G. White, Combining thermal resummation and gauge invariance for electroweak phase transition, (2022), [2203.04284].
- [14] J. Ghiglieri, G. D. Moore, P. Schicho, and N. Schlusser, The force-force-correlator in hot QCD perturbatively and from the lattice, JHEP 02, 58 (2022), [2112.01407].
- [13] J. Hirvonen, J. Löfgren, M. J. Ramsey-Musolf, P. Schicho, and T. V. I. Tenkanen, Computing the gauge-invariant bubble nucleation rate in finite temperature effective field theory, (2021), [2112.08912].
- [12] J. Löfgren, M. J. Ramsey-Musolf, P. Schicho, and T. V. I. Tenkanen, Nucleation at finite temperature: a gauge-invariant, perturbative framework, (2021), [2112.05472].
- [11] L. Niemi, P. Schicho, and T. V. I. Tenkanen, Singlet-assisted electroweak phase transition at two loops, Phys. Rev. D 103, 115035 (2021), [2103.07467].
- [10] D. Croon, O. Gould, P. Schicho, T. V. I. Tenkanen, and G. White, uncertainties for cosmological first-order phase transitions, JHEP 04, 055 (2021), [2009.10080].
- [9] P. M. Schicho, T. V. I. Tenkanen, and J. Osterman, Robust approach to thermal resummation: Standard Model meets a singlet, JHEP 06, 130 (2021), [2102.11145].
- M. Laine, P. Schicho, and Y. Schröder, A QCD Debye mass in a broad temperature range, Phys. Rev. D 101, 023532 (2020), [1911.09123].
- M. Laine, P. Schicho, and Y. Schröder, Soft thermal contributions to 3-loop gauge coupling, JHEP 2018, 37 (2018), [1803.08689].

Conference proceedings

M. Fraser, D. Björkman, K. Cornelis, B. Goddard, V. Kain, P. Schicho, C. Theis, and H. Vincke. Modelling the Radioactivity Induced by Slow-Extraction Losses in the CERN SPS. In Proc. of International Particle Accelerator Conference (IPAC'17) (May 2017), 1897-1900.

[5] M. A. Fraser, R. G. Alia, B. Balhan, H. Bartosik, C. Bertone, D. Björkman, J. Borburgh, N. Conan, K. Cornelis, L. Gatignon, B. Goddard, Y. Kadi, V. Kain, A. Mereghetti, F. Roncarolo, P. M. Schicho, J. Spanggaard, O. Stein, L. Stoel, F. M. Velotti, and H. Vincke. SPS Slow Extraction Losses and Activation: Challenges and Possibilities for Improvement. In Proc. of International Particle Accelerator Conference (IPAC'17) (Copenhagen. 2017), 611–614.

Theses

- [4] P. M. Schicho, Multi-loop investigations of strong interactions at high temperatures, PhD thesis (U. Bern, 2020).
- [3] P. M. Schicho, Inhomogeneous condensation in quark-based QCD effective models via wavelet pseudoparticles, MA thesis (ETH Zürich, 2016).
- [2] <u>P. Schicho</u>, π and ρ -Meson mass spectroscopy from Lattice QCD, BA thesis (TU Graz, 2014).
- [1] P. Schicho, Increasing the sensitivity of a search for supersymmetry in the single lepton channel with the Stransverse Mass, Project thesis (HEPHY Vienna, 2014).

Seminar and contributed talks

- 06/04/2022 (Non-)perturbative jet dispersion hot QCD, contributed talk at Quark Matter 2022, Kraków, Poland
- 30/03/2022 (Non-)perturbative jet dispersion hot QCD, contributed talk at Mini workshop: Phase transitions in particle physics, Galileo Galilei Institute, Firenze, Italy
- 03/03/2022 Effective theory approach to cosmological phase transitions, invited seminar talk at Instituto de Astrofísica de Canarias, La Laguna, Spain
- 28/10/2021 Gauge independent bubble nucleation rate at finite temperature, invited seminar talk at University of Basel, Basel, Switzerland
- 19/10/2021 Cosmological phase transition: Robust thermal resummation, invited seminar talk at University of Bern, Bern, Switzerland
- 13/05/2021 Cosmological phase transition: Robust thermal resummation, invited seminar talk at KIAS (online), Seoul, South Korea
- 29/03/2021 Soft thermal contributions to 3-loop gauge coupling, contributed parallel talk at Fun-QCD (online), Barcelona, Spain
- 25/11/2020 How to be precise at the electroweak scale at finite-temperature, invited seminar talk at Kavli IPMU (online), Tokyo, Japan

- 13/08/2019 3-Loop Gauge Coupling in Hot Yang-Mills, invited seminar talk at Helsinki Institute of Physics, Helsinki, Finland
- 28/08/2018 Fun with thermal dimension-six operators, invited seminar talk at Universidad del Bío-Bío, Chillán, Chile
- 28/06/2018 Fun with thermal dimension-six operators, contributed parallel talk at SEWM 2018, Barcelona, Spain