## New Trends in Thermal Phases of QCD 20-th workshop of PARTPHYS/CAAS

## April 14 – 17, 2023 Apolon's Hall, Vila Lanna, Bubeneč, Prague Faculty of Nuclear Sciences and Physical Engineering (FJFI, ČVUT) Nuclear Physics Institute (ÚJF AV ČR)

### Program

#### April 14, Friday

08:00 - 09:40	Karel Šafařík
	"ALICE experiment: past, present, and future"
09:40 - 10:40	Andrei Alexandru
	"Localization of Dirac modes in the IR phase"
10:40 - 11:10	Coffee Break
11:10 - 12:00	Yi-Bo Yang [online]
	"Dimension of Dirac modes in IR phase of strong interactions"
12:00 - 13:50	Lunch & Discussions [Lanna]
13:50 - 14:50	Claudio Bonanno
	"The QCD topological susceptibility at finite temperature: a new investigation
	with staggered spectral projectors"
14:50 - 15:00	Coffee Break
15:00 - 15:30	Peter Markoš
	"What can QCD practitioner learn from localization practitioner?"
15:30 - 16:00	Robert Mendris [online]
	"Equilibria of effective counting entropy"

#### April 15, Saturday

08:00 - 09:40	Tamáš Kovács
	"Topology and dynamical quarks in hot QCD"
09:40 - 10:40	Matteo Giordano
	"Goldstone's theorem and localisation of Dirac eigenmodes in gauge theories"
10:40 - 11:10	Coffee Break
11:10 - 12:10	Ravi Shanker
	"Eigenvalue spectrum of $2+1$ flavor QCD in the continuum limit"
12:10 - 13:50	Lunch & Discussions [individual]
13:50 - 14:50	Leonid Glozman
	"Chiral spin symmetry of QCD and its implications for hadrons in vacuum and for hot QCD"
14:50 - 15:00	Coffee Break
15:00 - 15:30	Owe Philipsen
	"Surprises on the way toward the QCD phase diagram"
15:30 - 16:00	Boris Tomášik
	"Non-critical particle number fluctuations"

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#### Program...

#### April 16, Sunday

08:00 - 09:40	Maria-Paola Lombardo
	"From the thermal QCD transition to the zero temperature conformal transition."
09:40 - 10:40	Keh-Fei Liu
	"Hadrons, Superconductor Vortices, and Cosmological Constant"
10:40 - 11:10	Coffee Break
11:10 - 12:10	Andrey Kotov
	"Thermal QCD phases by TWEXT collaboration"
12:10 - 14:00	Lunch & Discussions [Lanna]
14:00 - 15:00	Discussions in groups
15:00 - 15:30	Coffee Break
15:30 - 16:00	Discussions in groups

#### April 17, Monday

08:00 - 09:40	Lorenz von Smekal
	"Quarks in a finite volume and deconfinement as percolation of center-electric fluxes in QCD"
09:40 - 10:40	Oleg Borisenko
	"Complex masses in lattice models at finite density"
10:40 - 11:10	Coffee Break
11:10 - 12:00	Heng-Tong Ding [online]
	"Correlated Dirac eigenvalues and QCD chiral phase transition"
12:00 - 13:50	Lunch & Discussions [individual]
13:50 - 14:50	Roman Pasechnik
	"Strong-coupling dynamics in Cosmology and QCD phase transition"
14:50 - 15:00	Coffee Break
15:00 - 15:30	Michal Šumbera
	"QCD in the Early Universe"
15:30 - 16:00	Filip Křížek
	"Jets as a probe of QCD"

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