

Fifth Autumn School & Workshop of RTN

Program of the workshop

25.09 – Monday (TSU Building 1, room 06)

- 9:30-10:00 Registration
10:00 Opening Ceremony:
M.Chenkeli, Vice Rector of TSU
Ulf-G. Meißner, Speaker of the Regional Training Network
10:20-11:20 Seminar Meißner, Theory of nucleon and nuclear EDMs

11:20-11:50 Coffee

11:50-12:20 Jung, Bounds on New Physics from Electric Dipole Moments
12:20-12:50 Virto, Form factors with unstable particles: Calculations and Applications
12:50-13:20 Vos, CP violation in three-body B decays

13:20-14:30 Lunch

14:30-15:00 Greub, Towards next-to-leading precision for the
inclusive decay $B \rightarrow X_s \gamma \gamma$
15:00-15:30 Descotes-Genon, Global Fit to $b \rightarrow s \ell \ell$ and violation of lepton-flavour universality
15:30-16:00 van Dyk, Long-distance effects in exclusive $b \rightarrow s \ell \ell$ decays

16:00-16:30 Coffee

16:30-17:00 Khodjamirian, CP-symmetry violation in charm decays: QCD-based estimates
17:00-17:30 Epelbaum, Nuclear theory at the precision frontier
17:30-18:00 Kubis, Dispersive analysis of the light-meson transition form factors

26.09 – Tuesday (TSU Building 1, room 06)

- 9:00-9:30 Kobakhidze, Cosmological phase transition in the Standard Model
with hidden scale invariance
9:30-10:00 Devidze, Sterile neutrinos in flavor violating processes
10:00-10:30 Lavrelashvili, Aspects of quantum tunneling with gravity

10:30-11:00 Coffee

11:00-12:00 Seminar Dvali, Role of topology in dynamical breaking of chiral symmetry
in QCD and in Gravity
12:00-12:30 Berezhiani, More on gauge flavor symmetry
12:30-13:00 Chkareuli, Jejelava, Kepuladze*, Emergent photons and gravitons in four
space-time dimensions and beyond

13:00-14:30 Lunch

14:30-15:00 Kartvelishvili, Heavy Quarkonium Physics in ATLAS

15:00-15:30 Magradze, Strong coupling constant from tau-lepton decay data

15:30-16:00 Shanidze, Neutrino Oscillations and Probing the Neutrino Mass Hierarchy

16:00-16:30 Coffee

16:30-17:40 Lecture Sorba (1), From quarks to multi-quark states:
algebraic aspects and physics (Building 1, 06)

17:30-19:00 Vakhtang Kartvelishvili, Lecture for Juniors University students
(Building 2, Big Aula of Physics)

19:30-23:00 Workshop banquet in restaurant

“[Shadow of Metekhi](#)”, 29 Ketevan Tsamebuli Ave, Tbilisi.

27.09 – Wednesday (TSU Building 1, room 06)

9:00-10:00 Seminar Jabbari, Near Horizon Extremal Geometry Symplectic
Symmetry Algebra and Its Coadjoint Orbits

10:00-10:30 Jorjadze, $SL(2, \mathbb{R})$ string and Liouville theory.

10:30-11:00 Coffee

11:00-11:30 Gogberashvili, LIGO gravitational wave signals within the
braneworld scenario

11:30-12:00 Sarkissian, AGT correspondence and semiclassical limit of
conformal blocks

12:00-12:30 Kahniashvili, Cosmological Aspects of Extended Quasidilaton Massive Gravity

12:30-13:00 Gahramanov, Resurgence analysis: connecting perturbative and non-perturbative
sectors

13:00-14:30 Lunch

14:30-15:00 Gegelia, Effective field theory and triviality of quantum electrodynamics

15:00-15:30 Agadjanov, Aspects of nucleon Compton scattering on the lattice

15:30-16:00 Razzaghi, Neutrino masses

16:00-16:30 Coffee

16:30-17:40 Lecture Sorba (2), From quarks to multi-quark states:
algebraic aspects and physics

Program of the School

1. Thomas Mannel (Uni. of Siegen), "Flavour Physics and Heavy Quarks"
2. Evgeny Epelbaum (Uni. of Bochum), "Nuclear dynamics from chiral effective field theory"
3. Archil Kobakhidze (Uni. of Sydney), "CP violation and Axions"
4. Yosef Nir (Weizmann Institute), "Introduction to the Standard Model"
5. Giorgi Dvali (LMU and Max Planck Institute Muenchen), "Skyrmion black hole hair"
6. Paul Sorba (LAPTH, CNRS), "From quarks to multi-quark states: algebraic aspects and physics"

28.09 – Thursday (Juniors University of TSU, Chavchavadze Avenue 1, room 03)

9:30-10:40 Nir
10:40-11:10 Coffee
11:10-12:20 Nir
12:20-13:30 Lunch
13:30-14:40 Dvali
14:40-15:00 Coffee
15:00-16:10 Dvali
16:10-16:30 Coffee
16:30-17:40 Epelbaum

29.09 – Friday (Juniors University of TSU, Chavchavadze Avenue 1, room 03)

9:30-10:40 Nir
10:40-11:10 Coffee
11:10-12:20 Dvali
12:20-13:30 Lunch
13:30-14:40 Epelbaum
14:40-15:00 Coffee
15:00-16:10 Mannel
16:10-16:30 Coffee
16:30-17:40 Kobakhidze

30.09 – Saturday (Juniors University of TSU, Chavchavadze Avenue 1, room 03)

9:30-10:40 Epelbaum
10:40-11:10 Coffee
11:10-12:20 Mannel
12:20-13:30 Lunch
13:30-14:40 Mannel
14:40-15:00 Coffee
15:00-16:10 Kobakhidze
16:10-16:30 Coffee
16:30-17:40 Kobakhidze

18:00 Closing Ceremony.