

- UNESCO Regional Bureau for Science in Europe -
- Georgian Academy of Sciences - Tbilisi State University -

Selected Topics in Theoretical Physics

September 18-23, 2005, Tbilisi, Georgia

Sunday, September 18

10⁰⁰-10⁵⁵ Daniel Wyler (Zurich Univ., Switzerland)

Effective field theories in heavy quark systems

11⁰⁰-11⁵⁵ Dmitry Gorbunov (INR, Moscow, Russia)

Ultra-large distance modification of gravity from Lorentz symmetry breaking at the Planck scale

12⁰⁰-12³⁰

Break

12³⁰-13²⁵ Pasquale Sodano (Perugia Univ., Italy)

Boundary Conformal Field Theories for Quantum Devices

13³⁰-14³⁰

Lunch

15⁰⁰-15⁵⁵ Juergen Baacke (Dortmund Univ., Germany)

Quantum fluctuations and tunnelling

16⁰⁰-16⁵⁵ Dmitry Levkov (INR, Moscow, Russia)

Real-time instantons and suppression of collision-induced tunnelling

17⁰⁰-17³⁰

Break

17³⁰-18⁰⁰ George Tsitsishvili (RMI, Tbilisi, Georgia)

Topological solitons in non-commutative plane and quantum Hall skyrmions

18⁰⁰-18³⁰ Oleg Alekseev (ITEP, Moscow, Russia)

SLE and CFT

18³⁰

Welcome drink party

Monday, September 19

10⁰⁰-10⁴⁵ Hans-Jurgen Mikeska (Univ. of Hannover, Germany)

to be announced

10⁴⁵-11³⁰ Daniel Cabra (University of Strassburg, France)

Novel Phases in Two Dimensional Quantum Magnets

11³⁰-12⁰⁰

Break

12⁰⁰-12⁴⁵ Henrik Johannesson (Gothenberg University, Sweden)

Critical Theory of the Two-Channel Anderson Model

12⁴⁵-13³⁰ Roland Hayn (University of Marseille, France)

Spinons and holons in one-dimensional frustrated systems

13³⁰-14³⁰

Lunch

15⁰⁰-15⁴⁵ Andreas Honecker (Technical University Braunschweig, Germany)

Magnetocaloric effect in frustrated spin systems

15⁴⁵-16³⁰ Natasha Perkins (JINR, Dubna, Russia)

Frustrated Magnetism: Spinel with orbital degeneracy

16³⁰-17⁰⁰

Break

17⁰⁰-17³⁰ Nerses S. Ananikyan (YerPI, Yerevan, Armenia)

Multi-dimensional Mapping and Yang-Lee zeros for Helix-Coil transition of proteins

17³⁰-18⁰⁰ Saeed Mahdavi

Spin Ladder with alternating ring exchange in magnetic field

19³⁰

Conference dinner

Tuesday, September 20

10⁰⁰

Excursion

Wednesday, September 21

10⁰⁰-10⁵⁵ Merab Gogberashvili (IoP, Tbilisi, Georgia)

Localization of Fermions on the Brane

11⁰⁰-11⁵⁵ Emil Akhmedov (ITEP, Moscow, Russia)

Towards the Theory of Non-Abelian Tensor Fields

12⁰⁰-12³⁰

Break

12³⁰-13²⁵ Tinatin Kahniashvili (Kansas State Univ., USA)

Primordial helicity effects on CMB

13³⁰-14³⁰

Lunch

15⁰⁰-15³⁰ Ramaz Khomeriki (TSU, Tbilisi, Georgia)

Evidence of nonlinear bistability in a pendula chain

15³⁰-16⁰⁰ George Chavchanidze (RMI, Tbilisi, Georgia)

Involutive orbits of non-Noether symmetry groups

16⁰⁰-16³⁰ Dmitry Krotov (ITEP, Moscow, Russia)

A solvable sector of AdS theory

16³⁰-17⁰⁰

Break

17⁰⁰-17³⁰ Mikhail Maziashvili (TSU, Tbilisi, Georgia)

Dynamics of massive matter escape into extra space

17³⁰-18⁰⁰ Maksym Serbyn (ITEP, Moscow, Russia)
to be announced

Thursday, September 22

10⁰⁰-10⁵⁵ Zurab Berezhiani (Univ. L'Aquila and LNGS, Italy)
Neutron oscillation: a loophole in low energy particle physics?

11⁰⁰-11³⁰ Sasha Kvinikhidze (RMI, Tbilisi, Georgia)
to be announced

11³⁰-12⁰⁰ Badri Magradze (RMI, Tbilisi, Georgia)
A novel solution to the QCD renormalization group equation and its application

12⁰⁰-12³⁰

Break

12³⁰-13⁰⁰ Anzor Khelashvili (TSU, Tbilisi, Georgia)
Hidden symmetry operator in the Dirac equation

13⁰⁰-13³⁰ Temuraz Nadareishvili (TSU, Tbilisi, Georgia)
Self-adjoint extension in certain scattering problems

13³⁰-14³⁰

Lunch

15⁰⁰-15³⁰ Vadim Ohanyan (YerPI, Yerevan, Armenia)
Exact solution of the face-cubic spin model on Bethe lattice

15³⁰-16⁰⁰ Karen Sargsyan (YerPI, Yerevan, Armenia)
RNA Folding in the Presence of Counter-ions

16⁰⁰-16³⁰ Lev Ananikyan (YerPI, Yerevan, Armenia)
The hexagonal approximation to solid ^3He

16³⁰-17⁰⁰

Break

17⁰⁰-17³⁰ Paata Kakashvili (Chalmers University of Technology, Sweden)
to be announced

17³⁰-18⁰⁰ Arsen Khvedelidze (Plymouth Univ. & JINR, Dubna, Russia)*
to be announced

Scientific Sessions will be held at:

Institute of Physics
6 Tamarashvili street,
0177 Tbilisi

Bus from the Hotel Iliani to the Institute of Physics will depart on 9³⁰ AM. For presentations we will have an overhead projector for transparencies, beamer and a blackboard.

List of Participants

1. Jahanfar Abouie (IAS, Zanjan, Iran)
2. Oleg Alekseev (ITEP, Moscow, Russia)
3. Emil Akhmedov (ITEP, Moscow, Russia)
4. Lev Ananikyan (YerPI, Yerevan, Armenia)
5. Nerses S. Ananikyan (YerPI, Yerevan, Armenia)
6. Juergen Baacke (Dortmund Univ., Germany)
7. Zurab Berezhiani (Univ. L'Aquila and LNGS, Italy)
8. Daniel Cabra (University of Strassburg, France)
9. George Chavchanidze (RMI, Tbilisi, Georgia)
10. Merab Eliashvili (RMI, Tbilisi, Georgia)
11. Merab Gogberashvili (IoP, Tbilisi, Georgia)
12. Dmitry Gorbunov (INR, Moscow, Russia)
13. Roland Hayn (University of Marseille, France)
14. Andreas Honecker (Technical Univ. Braunschweig, Germany)
15. George Japaridze (IoP, Tbilisi, Georgia)
16. Henrik Johannesson (Gothenberg University, Sweden)
17. Paata Kakashvili (Chalmers University of Technology, Sweden)
18. Tinatin Kahniashvili (Kansas State Univ., USA)
19. Tamar Khachidze (TSU, Tbilisi, Georgia)
20. Anzor Khelashvili (TSU, Tbilisi, Georgia)
21. Ramaz Khomeriki (TSU, Tbilisi, Georgia)
22. Arsen Khvedelidze (Plymouth Univ. & JINR, Dubna, Russia)
23. Dmitry Krotov (ITEP, Moscow, Russia)
24. Sasha Kvinikhidze (RMI, Tbilisi, Georgia)
25. George Lavrelashvili (RMI, Tbilisi, Georgia)
26. Dmitry Levkov (INR, Moscow, Russia)
27. Badri Magradze (RMI, Tbilisi, Georgia)
28. Saeed Mahdavi (IAS, Zanjan, Iran)
29. Paul Midodashvili (Tskhinvali State University, Georgia)
30. Mikhail Maziashvili (TSU, Tbilisi, Georgia)
31. Hans-Jurgen Mikeska (Univ. of Hannover, Germany)
32. Temuraz Nadareishvili (TSU, Tbilisi, Georgia)
33. Vadim Ohanyan (YerPI, Yerevan, Armenia)
34. Natasha Perkins (JINR, Dubna, Russia)
35. Valeria Petrosyan (TSU, Tbilisi, Georgia)
36. Ervand Pogosyan (IoP, Tbilisi, Georgia)
37. Karen Sargsyan (YerPI, Yerevan, Armenia)
38. Maksym Serbyn (ITEP, Moscow, Russia)
39. Pasquale Sodano (Perugia Univ., Italy)
40. George Tsitsishvili (RMI, Tbilisi, Georgia)
41. Teimuraz Vekua (IoP, Tbilisi, Georgia)
42. Daniel Wyler (Zurich Univ., Switzerland)