

Guest House of the Yerevan State University
International Workshop
Supersymmetry in Integrable Systems
24-28 August 2010

Program

24 August

- 09.00 - 09.45 **Registration**
- 09.45 - 10.00 **Opening**
- 10.00 - 10.40 **Andrei Smilga**, Nantes, France
Dirac complex, twisted Dolbeault complex, and supersymmetry
- 10.40 - 11.20 **Sergey Krivonos**, Dubna, Russia
Hyper-Kahler sigma models and non-Abelian monopole background
- 11.20 - 11.50 **Coffee break**
- 11.50 - 12.30 **Tigran Tchrakian**, Maynooth, Ireland
Abelian and non-Abelian solitons stabilised by Chern–Simons charges: Hopf like solitons in all dimensions
- 12.30 - 14.00 **Lunch**
- 14.00 - 15.00 **Evgeny Ivanov**, Dubna, Russia
Harmonic superspace in one dimension: applications in $\mathcal{N} = 4$ SQM models
- 15.00 - 15.30 **Coffee break**
- 15.30 - 16.10 **Andreas Wipf**, Jena, Germany
Supersymmetries of Dirac operators with examples
- 16.10 - 16.50 **Francesco Toppan**, Rio de Janeiro, Brazil
Extended supersymmetries in 1D
- 16.50 - 17.00 **Break**
- 17.00 - 17.20 **Zhanna Kuznetsova**, Santo Andre(SP), Brazil
Supersymmetric multiplets embedding in different spaces. Formal construction.
- 17.20 - 17.40 **Vahagn Yeghikyan**, Yerevan, Armenia
Hopf maps and Wigner’s little groups

25 August

- 09.30 - 10.30 **Alexander Veselov**, Loughborough, United Kingdom
Deformed Calogero-Moser systems and Lie superalgebras
- 10.30 - 11.00 **Coffee break**
- 11.00 - 11.40 **Mikhail Feigin**, Glasgow, United Kingdom
Generalized Calogero-Moser and Macdonald-Ruijsenaars systems from Cherednik algebras
- 11.40 - 12.20 **Tigran Hakobyan**, Yerevan, Armenia
Invariants of the spherical sector of conformal mechanics
- 12.20 - 14.00 **Lunch**
- 14.00 - 15.00 **Olaf Lechtenfeld**, Hannover, Germany
 $\mathcal{N} = 4$ multi-particle mechanics, WDVV equations and deformed root systems
- 15.00 - 15.30 **Coffee break**
- 15.30 - 16.10 **Jeremy Schiff**, Ramat Gan, Israel
Between continuous and discrete in integrable systems
- 16.10 - 16.50 **Bum-Hoon Lee**, Seoul, Korea
Integrability and finite size effects in dyonic magnons
- 16.50 - 17.00 **Break**
- 17.00 - 17.20 **Roldao da Rocha**, Santo Andre (SP), Brazil
A tutorial on quantum Clifford algebras and some of their applications
- 17.20 - 17.40 **Adam Rej**, London, United Kingdom
Integrability in AdS/CFT correspondence

19.30 Banquet

26 August

- 09.30 - 10.30 **V. Parameswaran Nair**, New York, USA
Reflections on fuzzy spaces, Landau levels and gravity
- 10.30 - 11.00 **Coffee-break**
- 11.00 - 11.40 **Kazuki Hasebe**, Kagawa, Japan
Fuzzy geometry, supersymmetry and many-body physics
- 11.40 - 12.20 **Robert Schrader**, Berlin, Germany
Finite wave propagation speed on metric graphs
- 12.20 - 14.00 **Lunch**
- 14.00 - 15.00 **Richard Szabo**, Edinburgh, United Kingdom
Crystals, instantons and quantum geometry
- 15.00 - 15.30 **Coffee break**
- 15.30 - 16.10 **Ruben Manvelyan**, Yerevan, Armenia
Interaction for higher spin gauge fields and Noether's procedure.
- 16.10 - 16.50 **Mohab Abou Zeid**, Hannover, Germany
Noncommutative geometry with torsion and vortex solitons
- 16.50 - 17.00 **Break**
- 17.00 - 17.20 **Gor Sarkissian**, Yerevan, Armenia
Defects in the Liouville field theory
- 17.20 - 17.40 **Akifumi Sako**, Kushiro, Japan
Deformation quantization of instantons in R^4

27 August

- 09.30 - 10.30 **Ruben Minasian**, Saclay, France
Internal structure of string vacua: from NON-geometric susy to NON-supersymmetric geometry
- 10.30 - 11.00 **Coffee break**
- 11.00 - 11.40 **Rainald Flume**, Bonn, Germany
About matrix models
- 11.40 - 12.20 **Rubik Poghosian**, Yerevan, Armenia & Rome, Italy
Deforming SW curve
- 12.20 - 14.00 **Lunch**
- 14.00 - 15.00 **Peter Horvathy**, Tours, France
SUSY, from QM to anyons
- 15.00 - 15.30 **Coffee break**
- 15.30 - 16.10 **Alexei Isaev**, Dubna, Russia
Discrete evolution operator for q -deformed top and Faddeev's modular double
- 16.10 - 16.50 **Hovhannes Khudaverdian**, Manchester, United Kingdom
Geometry of second order operators and odd symplectic structures
- 16.50 **Closing**

28 August

- 10.00 **Excursion to Nor-Amberd**