Summer Workshop on Algebraic Geometry and Physics

Castillo de la Mota, Medina del Campo, Spain

September 16–20, 1997

Sponsored by
- Universidad de Salamanca, Spain
- International School for Advanced Studies (SISSA-ISAS), Trieste (Italy)
- Junta de Castilla y León

Preliminary Programme

Tuesday 16 September

12:00 Registration
13:00 Informal gathering and wine party
14:00 **Lunch**
16:30 E. Getzler, The structure of two-dimensional topological field theories at genus 1 (I)
17:30 Coffee break
18:00 K. Fukaya, Deformation of A^∞ structure and quantum cohomology
18:30 R. Kaufmann, The tensor product in the theory of Frobenius manifolds and quantum cohomology
19:00 M. Verbitsky, New examples of compact hyperkähler manifolds
20:30 **Dinner**

Wednesday 17 September

09:30 R. Dijkgraaf, String duality and algebraic geometry (I)
10:30 B. Dubrovin, Quantum cohomologies and isomonodromy deformations (I)
11:30 Coffee break
12:00 V. Batyrev, Mirror symmetry and Calabi-Yau manifolds
12:30 F. Plaza, The automorphisms group of $k((z))$: applications to the bosonic string
13:00 A. Bondal, A symplectic grupoid and Poisson-Lie groups
14:00 **Lunch**
16:30 E. Getzler, The structure of two-dimensional topological field theories at genus 1 (II)
17:30 Coffee break
18:00 C. Viallet, Singularity and integrability of rational transformations
18:30 G. Falqui, On some algebro-geometrical and cohomological aspects of the KP hierarchy
19:00 K. Takasaki, Isomonodromic deformations and Whitham equations
20:30 **Dinner**

Thursday 18 September

09:30 R. Dijkgraaf, String duality and algebraic geometry (II)
10:30 B. Dubrovin, Quantum cohomologies and isomonodromy deformations (II)
11:30 Coffee break
12:00 O. García-Prada, Gauge theory in higher dimensions
12:30 C. Bartocci, Fourier-Mukai transform and mirror duality
13:00 V. Schechtman, Screening operators, Lie-de Rham cocycles and Gromov-Witten invariants
14:00 **Lunch**
16:30 E. Getzler, The structure of two-dimensional topological field theories at genus 1 (III)
17:30 Coffee break
18:00 A.K. Raina, Energy-momentum tensor in conformal field theory and projective structure
18:30 A. Maciocia, Fourier-Mukai transforms for K3 fibrations
19.00 V. Muñoz Velázquez, Basic classes for fiber connected sums of four-manifolds
20:30 **Dinner**

Friday 19 September

09:30 R. Dijkgraaf, String duality and algebraic geometry (III)
10:30 B. Dubrovin, Quantum cohomologies and isomonodromy deformations (III)
11:30 Coffee break
12:00 S. A. Santa Cruz, Twistor geometry for hyperkähler metrics on complex adjoint orbits
12:30 M. Pedroni, A Lie-algebraic generalization of the Mumford system, its symmetries and its multi-Hamiltonian structure
13:00 V. Nikulin, The arithmetic Mirror Symmetry
14:00 **Lunch**
16:00 Guided tour of Salamanca
21:30 Social dinner

Saturday 20 September

09:30 I. Quandt, On a relative version of the Krichever correspondence
10:00 I. G. Korepanov, Tetrahedron equation and algebraic geometry
10:30 P.A. Foth, Moduli of flat bundles on open Kähler manifolds
11:00 G. Valli, Some new ranges for Atiyah-Jones stability theorem
11:30 Coffee break
12:00 M. Asorey, Unstable bundles in quantum gauge theories
12:30 T. L. Gómez de Quiroga, Brill-Noether theory on singular curves and vector bundles on K3 and del Pezzo surfaces
13:00 S. Natanzon, A compactification of the Hurwitz space
14:00 **Lunch**