WORKSHOP ON ALGEBRAIC GEOMETRY AND PHYSICS

ALGEBRAIC GEOMETRY AND INTEGRABLE SYSTEMS

SISSA, Trieste,

October 16–19, 2000

Supported by:

International School for Advanced Studies

National Research Project
"Geometry of Integrable Systems"

Preliminary Programme

Monday, October 16

9:00 Registration

9:30 G. Felder, Poisson σ-models and deformation quantization (I).

10:30 E. Frenkel, W-algebras and integrable systems (I).

11:30 Coffee break

12:00 P. Van Moerbeke, Integrable lattices, random matrices and permutations

13:00 Lunch

14:30 R. Kaufmann, Orbifolding Frobenius manifolds

15:00 S. Abenda, Dynamical and geometric aspects of a class of integrable systems with deficiency

15:30 O. Sheinman, Representations of Krichever-Novikov algebras and their applications

16:00 Coffee break

16:30 C. Doran, Algebraic and geometric isomonodromic deformations

17:00 T. Jarvis, The moduli space of higher r-spin maps and quantum cohomology

18:00 Reception

Tuesday, October 17

9:30 M.H. Saito, Deformation of Okamoto–Painlevé pairs and Painlevé equations

10:30 G. Felder (II)

11:30 Coffee break

12:00 D.H. Phong, Supersymmetric gauge theories and integrable models (I)

13:00 Lunch

14:30 T. Kimura, Integrable hierachies, moduli spaces and topological field theories

15:00 C. Kokorelis, $N = 2$ string theories

15:30 Coffee break

16:00 B. Kreussler, On homological mirror symmetry in dimension one

16:30 J. Isidro, The concept of a noncommutative Riemann surface

Wednesday, October 18

9:30 E. Frenkel (II)

10:30 D.H. Phong (II)

11:30 Coffee break

12:00 K. Yoshioka, Fourier-Mukai transform and moduli of bundles on K3 surfaces

12:30 A. Mavlyutov, The chiral ring of Calabi-Yau hypersurfaces and a generalization of the monomial-divisor mirror map

13:00 Lunch

Free afternoon

20:00 Conference Dinner

Thursday, October 19

9:30 D.H. Phong (III)

10:30 G. Felder (III)

11:30 Coffee break

12:00 E. Frenkel (III)

13:00 Lunch

14:30 J. Zubelli, Teichmüller spaces, geodesic flows on diffeomorphisms of the circle, and the periodic KdV equation

15:00 K. Oh, Geometry and gauge theory from branes on orbifolded conifolds

15:30 M. Schlichenmaier, Elements of a global operator approach to WZNW models

16:00 G. Volkov, Towards an algebraic classification of Calabi-Yau manifolds