Workshop "Complex Geometry and Lie Groups" June 16-20, 2014, Torino

PROGRAM

Monday, 16 [2 plenary & 2 research talks]

10:00-12:30 REGISTRATION (No talks in the morning)

14:00-15:00 Adriano Tomassini: On the cohomology of complex manifolds

15:15-16:15 Misha Verbitsky: Hypercomplex manifolds of quaternionic dimension 2 and HKT-structures

16:15-16:45 Coffee Break

16:45-17:30 Simon G. Chiossi: Hermitian surfaces with small holonomy.

17:45-18:30 Rebecca Glover: Generalized twistor spaces for hyperkähler manifolds.

Tuesday, 17 [4 plenary & 3 research talks]

09:00-10:00 Vestislav Apostolov: From locally conformally Kähler to bi-Hermitian structures.

10:15-11:15 Florin Belgun: Special classes of non-Kähler metrics in low dimensions.

11:15-11:45 Coffee Break

11:45-12:30 Hiroaki Ishida: *Complex manifolds with maximal torus actions.*

12:30-14:00 Lunch Break

14:00-15:00 Vicente Cortés: Homogeneous locally conformally Kähler manifolds.

15:15-16:15 Massimiliano Pontecorvo: *Index of Kato surfaces*

16:15-11:45 Coffee Break

16:45-17:30 Hisashi Kasuya: *Hodge theory on solvmanifolds.*

17:45-18:30 Eveline Legendre: Labelled convex quadrilaterals and toric Kähler-Levi structures on the CR structure of $S^3 \times S^3$.

Wednesday, 18 [2 plenary & 1 research talks]

09:00-10:00 Marisa Fernández: On the formality of co-symplectic and Sasakian manifolds.

10:15-11:15 Ryushi Goto: Deformations of generalized complex manifolds and locally conformally generalized Käher structures.

11:15-11:45 Coffee Break

11:45-12:30 Thomas Buun Madsen: *The geometry of SO*(3)-structures on 6-manifolds.

Excursion in the afternoon and Social Dinner in the evening

Thursday, 19 [2 plenary & 11 research talks]

- 09:00-10:00 Yoshinori Namikawa: A characterization of nilpotent varieties of complex semisimple Lie algebras.
- 10:15-11:15 Jean Pierre Demailly: Strong openness conjecture and generalized Nadel vanishing theorem.

11:15-11:45 Coffee Break

11:45-12:30 Shin-ichi Matsumura: *An injectivity theorem with multiplier ideal sheaves of singular metrics with transcendental singularities.*

12:30-14:00: Lunch Break

[Parallel Session 1]

- 14:00-14:40 Amedeo Altavilla: *The real differential of a slice regular function.*
- 14:50-15:30 Yunhyung Cho: Hard Lefschetz property for Simple Hamiltonian S¹-manifolds.

15:30-16:00 Coffee Break

- 16:00-16:40 Zdenek Dusek: How many are torsion-less affine connections in general dimension.
- 16:50-17:30 Marco Freibert: On the boundary behaviour of the hypo and Hitchin flow on Lie groups.
- 17:40-18:20 Homare Tadano: *Gap theorems for compact gradient Sasaki-Ricci solitons.*

[Parallel Session 2]

- 14:00-14:40 Stefan Bechtluft-Sachs: Congruence Invariants for Holomorphic Maps and Rigidity.
- 14:50-15:30 Jess Boling: Homogeneous Solutions of Pluriclosed Flow on Closed Complex Surfaces.

15:30-16:00 Coffee Break

- 16:00-16:40 Giovanni Calvaruso: A complete classification of four-dimensional paraKähler Lie algebras.
- 16:50-17:30 Yunhee Euh: Orthogonal almost complex structures on the Riemannian products of even dimensional spheres.
- 17:40-18:20 Wlodzimierz Jelonek: Kähler surfaces with quasi-constant holomorphic curvature.

Friday, 20 [3 plenary & 0 research talks]

- 09:00-10:00 Dmitri Alekseevsky: Cohomogeneity one Kähler and Kähler-Einstein manifolds.
- 10:15-11:15 Akira Fujiki: Donaldson-Friedman degeneration of anti-self-dual hermitian structures and Lee classes.

11:15-11:45 Coffee Break

11:45-12:45 Simon Salamon: TBA

(*) The workshop room is *Aula Magna* for Mon. afternoon, Tues., Wed. and Thr. Morning; *Aula Magna* for session 1, *Aula C* for session 2; and *Aula A* for Fri. Morning.