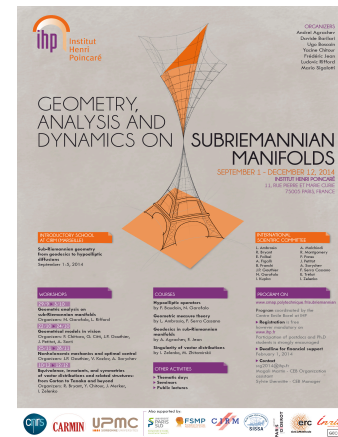


« **Geometry, Analysis and Dynamics on Sub-Riemannian Manifolds** »
September 1st – December 12th, 2014

Workshop
« **Equivalence, invariants, and symmetries of vector distributions and related structures : from Cartan to Tanaka and beyond** »
Paris, December 10th – December 12th, 2014
Amphithéâtre Hermite



ORGANIZERS

R. Bryant (Duke), **Y. Chitour** (Orsay), **J. Merker** (Orsay), **I. Zelenko** (Texas A&M)

SPEAKERS

Valery Beloshapka (Moscow)
Robert Bryant (Duke University)
Andreas Cap (Vienna)
Boris Doubrov (Minsk)
Maciej Dunajski (Cambridge)
Matthias Hammerl (Greifswald, Germany)
Jun-Muk Hwang (KIAS)

Svetlana Ignatovich (Kharkiv)
Alexander Isaev (Canberra, Australia)
Velimir Jurdjevic (Toronto)
Aroldo Kaplan (Cordoba, Argentina)
Boris Kruglikov (Tromsø, Norway)
Richard Montgomery (Santa Cruz, USA)
Tohru Morimoto (Nara, Japan)

Gil Bor (CIMAT, Mexico)
Alessandro Ottazzi (University of Trento, Italy)
Colleen Robles (College Station, USA)
Jan Slovak (Brno)

PROGRAM

Wednesday December 10th

08.30 am – 09.00 am	Registration	IHP Ground floor
09.00 am – 10.00 am	Robert Bryant	Some geometric constructions of holonomic plane fields and their analysis.
10.00 am – 10.30 am	Coffee break	IHP Ground floor
10.30 am – 11.30 am	Tohru Morimoto	Equivalence problems of geometric structures and applications to differential equations and subriemannian geometries.
11.35 am – 12.35 pm	Boris Kruglikov	Tanaka theory and dimensional bounds for the symmetry algebras.
12.35 pm – 02.00 pm	Lunch time	
02.00 pm – 03.00 pm	Andreas Cap	Projective compactness.
03.05 pm – 04.05 pm	Velimir Jurdjevic	Integrable affine-quadratic systems on Lie groups: geometry and mechanics.
04.05 pm – 04.35 pm	Coffee break	IHP Ground floor
04.35 pm – 05.35 pm	Alessandro Ottazzi	Diffeomorphisms in Carnot groups and Tanaka prolongation.

Thursday December 11th

09.00 am – 10.00 am	Jun-Muk Hwang	Cone structures with characteristic connections.
10.00 am – 10.30 am	Coffee break	IHP Ground floor
10.30 am – 11.30 am	Colleen Robles	Characteristic cohomology of the horizontal distribution on flag manifolds and flag domains.
11.35 am – 12.35 pm	Boris Doubrov	Equivalence problem of vector distributions via abnormal extremals.
12.35 pm – 02.00 pm	Lunch time	
02.00 pm – 03.00 pm	Gil Bor	Rolling of projective planes with G ₂ -symmetry.
03.05 pm – 04.05 pm	Svetlana Ignatovich	On application of formal power series and free algebras in the homogeneous approximation problem for nonlinear control systems.
04.05 pm – 04.35 pm	Coffee break	IHP Ground floor
04.35 pm – 05.35 pm	Maciej Dunajski	Conformally Einstein metrics and three dimensional path geometries.

Friday December 12th

09.00 am – 10.00 am	Alexander Isaev	Reduction of five-dimensional uniformly Levi degenerate CR-structures to absolute parallelisms and its application to establishing the affine rigidity of Levi degenerate tube hypersurfaces.
10.00 am – 10.30 am	Coffee break	IHP Ground floor
10.30 am – 11.30 am	Richard Montgomery	A Tale of Two Towers.
11.35 am – 12.35 pm	Aroldo Kaplan	Non-integrable systems in algebraic geometry.
12.35 pm – 02.00 pm	Lunch time	
02.00 pm – 03.00 pm	Jan Slovak	Subriemannian Metrics and some Parabolic Geometries.
03.05 pm – 04.05 pm	Valery Beloshapka	Coordinate approach in CR-geometry.
04.05 pm – 04.35 pm	Coffee break	IHP Ground floor
04.35 pm – 05.35 pm	Matthias Hammerl	A non-normal Fefferman-type construction: Holonomy-methods and characterization.