

# Special Holonomy and Geometric Structures on Complex Manifolds

## IMPA, Rio de Janeiro, Março 11 – 15

Ricardo Mañé Auditorium

Hour	Monday, 11	Tuesday, 12	Wednesday, 13	Thursday, 14	Friday, 15
08:30 - 09:15	Registration				
09:15 - 09:30	Opening				
09:30 - 10:30	<b>Robert Bryant (Duke)</b> <i>A century of holonomy</i>	<b>Claude LeBrun (Stony Brook)</b> <i>Gravitational Instantons, Weyl Curvature, &amp; Conformally Kähler Geometry</i>	<b>John Loftin (Rutgers)</b> <i>Cubic Differentials and Harmonic Maps into an Asymptotic Cone</i>	<b>Simon Salamon (KCL)</b> <i>Weak holonomy with symmetry</i>	<b>Jorge Lauret (Córdoba)</b> <i>Stable Homogeneous Einstein Metrics</i>
10:30 - 11:30	<b>Jason Lotay (Oxford)</b> <i>Translators in Lagrangian mean curvature flow</i>	<b>Andrei Moroianu (Paris Saclay)</b> <i>Locally conformally product structures</i>	<b>Bobby Acharya (KCL/ICTP)</b> <i>Special Holonomy Cones, Conformal Field Theories and Confinement in Five Dimensions</i>	<b>Lorenzo Foscolo (Rome)</b> <i>Hypertoric varieties, W-Hilbert schemes and Coulomb branches</i>	<b>Johannes Nordström (Bath)</b> <i>Rational homotopy type of closed 7- and 8-manifolds</i>
11:30 - 12:00	Coffee Break				
12:00 - 13:00	<b>Ilka Agricola (Marburg)</b> <i>3-(<math>\alpha</math>, <math>\delta</math>)-Sasaki Manifolds and Strongly Positive Curvature</i>	<b>Andrzej Derdzinski (Ohio State)</b> <i>Killing and Ricci-Hessian equations in (pseudo)Kähler geometry</i>	<b>Mirjam Cvetič (UPenn)</b> <i>Higher Symmetries of Quantum Field Theory from String Theory on Singular (Non-)Compact Special Holonomy Spaces</i>	<b>Daniel Fadel (UFRJ)</b> <i>Stability of critical points of the self-dual abelian YM energy on Kähler manifolds</i>	<b>Adrián Andrada (Córdoba)</b> <i>On The Canonical Bundle Of The Complex Manifolds Underlying A Compact Hypercomplex Manifold</i>
13:00 - 14:30	Lunch				
14:30 - 15:30	<b>Andryi Haydys (Brussels)</b> <i>An index theorem for <math>Z/2</math> harmonic spinors</i>	<b>Mario Garcia Fernandez (UAM)</b> <i>Vertex algebras from the Hull-Strominger system</i>	F R E  A F T E R N O O N	<b>Anna Fino (Miami/Torino)</b> <i>Non-Kähler manifolds via mapping tori</i>	<b>Mark Haskins (Duke)</b> <i>Recent developments in Laplacian flow of <math>G_2</math> structures</i>
15:30 - 16:00	Poster Session - Coffee Break			Poster Session - Coffee Break	
16:00 - 17:00	<b>Udhav Fowdar (Unicamp)</b> <i>On flows of <math>SU(2)</math>-structures</i>	<b>Jakob Stein (Unicamp)</b> <i>Invariant gauge theory on asymptotically local conical <math>G_2</math> metrics</i>		<b>Nicoletta Tardini (Parma)</b> <i>Dolbeault and Bott-Chern harmonic forms on almost- Hermitian manifolds</i>	<b>Hans-Joachim Hein (Münster)</b> <i>Immortal solutions of the Kähler-Ricci flow</i>