



# International Conference Relativity and Geometry in memory of André Lichnerowicz

December 14-16, 2015 Institut Henri Poincaré & Collège de France

## *Program*

### **Monday, December 14**

- 9:00 - 9:50 *Registration*  
9:50 - 10:00 *Opening*  
10:00 - 11:00 **P. Cartier** *Lichnerowicz and spinors*  
*Coffee break*  
11:30 - 12:30 **R. Bryant** *Beyond holonomy: constrained structure equations*  
*Lunch break*  
14:30 - 15:30 **C. Fronsdal** *Action principle for thermodynamics?*  
*Coffee break*  
16:00 - 17:00 **O. Biqard** *On 4-dimensional Einstein manifolds*  
17:00 - 18:00 **S. Klainerman** *Are black holes real?*  
18:00 *Reception at IHP.*

### **Tuesday, December 15**

- 9:00 - 10:00 **S. Gutt** *A symplectic analogue to spaces of constant curvature*  
*Coffee break*  
10:30 - 11:30 **M. Dubois-Violette** *Local Einstein-Cartan actions*  
11:30 - 12:30 **T. Damour** *The problem of motion in general relativity*  
*Lunch break*

**Afternoon session at the amphithéâtre Marguerite de Navarre, Collège de France.**

- 14:30 - 15:30 **S. Donaldson** *Special holonomy and adiabatic limits*  
15:30 - 16:30 **M. Kontsevich** *Noncommutative Kähler geometry*  
*Coffee break*  
17:00 - 18:00 **Remembering Lichnerowicz and his works**  
*Y. Choquet-Bruhat, M. Cahen, M. Modugno, J.-P. Bourguignon, and A. Connes*

### **Wednesday, December 16**

- 9:00 - 10:00 **N. Deruelle** *On the equivalence principle, from Newton to Einstein and beyond*  
*Coffee break*  
10:30 - 11:30 **J. Isenberg** *Expliciting the space of solutions of the Lichnerowicz equation and the Einstein constraints*  
11:30 - 12:30 **C. Frances** *A. Lichnerowicz and the conformal group of pseudo-Riemannian manifolds*  
*Lunch break*  
14:30 - 15:30 **A. Cattaneo** *BV-BFV theories on manifolds with boundary and general relativity*  
*Coffee break*  
16:00 - 17:00 **E. Frenkel** *Geometry, duality, and quantum physics*  
17:00 *Closing*