

**Testing the Equivalence Principle -  
From the basis of General Relativity to a key to Quantum Gravity**

**9h00 – 10h35**

**Theoretical Motivations for tests of the weak equivalence principle (WEP)**

*Chairman: Luc Blanchet*

E. Rosencher (5 min) “Welcome”

T. Damour (30 min) “Theoretical Aspects of the Equivalence Principle”

C. Lämmerzahl (30 min) “On the meaning of the Equivalence Principle”

C. Cohen-Tannoudji (30 min) “Gravitational red shift. Atomic clocks versus atomic gravimeters”

**10h35 – 11h00 Pause café**

**11h00 – 12h20**

**Ways of testing WEP**

*Chairman: Richard Davis*

J. Gundlach (20 min) "Torsion Balance Equivalence Principle Tests at the University of Washington"

T. Sumner (20 min) “The STEP and GAUGE missions”

E. Rasel (20 min) “Interferometry with matter waves in extended free fall”

A. Landragin (20 min) "Testing the equivalence principle with atom interferometry: the ICE experiment and the QUEST project"

**12h20 – 13h20 Lunch**

**13h20 – 15h05**

**Microscope: Status and Context**

*Chairman: Christophe Salomon*

P. Touboul and G. Métris (20 min) “The WEP experiment of the MICROSCOPE mission”

H. Selig (15 min) “Free fall payload test environment and mission simulation”

D. Hagedorn (15 min) “Microscope Test Mass Fabrication – Challenges & Achievements”

A. Atzei (15 min) “The Gaia micro propulsion system and its application for Microscope”

H. Dittus (20 min) “From an experimental idea to a satellite”

S. Léon (20 min) “Microscope status at CNES”

**15h05 – 15h30 Pause café**

**15h30 – 17h00 Round table discussion**

*Chairman: Peter Wolf*