

# **2nd International Workshop on Antimatter and Gravity ( WAG 2013 )**



**Wednesday 13 November 2013 - Friday 15 November 2013**

## **Scientific Programme**

**T. Ariga (Albert Einstein Center for Fundamental Physics, Laboratory for High Energy Physics, U. Bern)**

Measuring gbar with emulsion detectors

**H. Baumann (Federal Institute of Metrology, Bern)**

High precision measurements of the gravitational acceleration g

**A. Benoît-Lévy (University College, London)**

The Dirac-Milne cosmological model

**L. Blanchet (Inst. d'Astrophysique, Paris)**

MOND phenomenology and gravitational polarization

**C. Bordé (SYRTE, Observatoire de Paris)**

5D relativistic optics for matter and antimatter wave interferometry

**P. Bräunig (Kirchhoff Institute of Physics, Heidelberg)**

Moiré deflectometry with atoms and antiatoms

**D. B. Cassidy (University College, London)**

Weighing antimatter with positronium

**M. Charlton (Swansea University)**

SUMMMARY talk

**P. Crivelli (ETH-Zurich)**

Testing antigravity with positronium

## **J. Fajans (University of California, Berkeley)**

A new technique to measure the gravitational mass of antihydrogen

## **K. Hashimoto (Osaka University)**

Lorentz violation and vacuum structure in string theories

## **L. Hilico (Laboratoire Kastler-Brossel, Paris)**

Measuring the free fall of antihydrogen with GBAR

## **M. Holzscheiter (University of New Mexico)**

Test of the weak equivalence principle from particle-antiparticle cyclotron frequencies

## **M. Jankowiak (Heidelberg)**

Experimental constraints on the gravitational force on antimatter

## **S. Karshenboim (Max Planck Institute for Astrophysics, Munich)**

Constraints from the weak equivalence principle

## **M. Kasevich (Stanford University)**

Experimental tests of the weak equivalence principle

## **K. Kirch (Paul Scherrer Institut, Villigen)**

Testing antigravity with muonium

## **D. Krasnicky (INFN Genova)**

Measuring gbar with AEgIS, progress and perspectives

## **S. Maury (CERN)**

Present and future facilities at CERN

## **A. Nobili (Pisa University)**

Testing the weak equivalence principle with macroscopic proof masses on ground and in space

## **W. Quint (GSI, Darmstadt)**

An Antigravity Experiment for the Future FLAIR Facility

## **S. Reynaud (Laboratoire Kastler Brossel, Paris)**

Quantum reflection of antihydrogen from material surface

## **P. Salati (Laboratoire d'Annecy-le-Vieux de Physique Théorique LAPTH)**

Dark matter annihilation in the Universe

## **G. Skinner (Das Max-Planck-Institut für extraterrestrische Physik, Munich)**

Antimatter in the Universe and the PAMELA/FERMI anomaly

## **J. Tasson (Carleton College, Northfield, USA)**

Gravity effects on antimatter

## **C. S. Unnikrishnan (Tata Institute of Fundamental Research, Mumbai)**

True tests of the weak equivalence principle for antiparticles

## **D. P. Van der Werf (Swansea University)**

The GBAR experiment

## **A. Voronin (Lebedev Physical Institute)**

Gravitational quantum states of antihydrogen