## AstroParticule et Cosmologie, University Paris Diderot



75 permanent researchers, 60 technical and administrative staff

presently 38 Ph.D. students and 17 postdocs

Main themes of research:

- cosmology and gravitation
- high energy astrophysics
- neutrino physics

Connected with three main doctorate schools in Paris, as well as the international doctorate program IDAPP (yearly meeting at APC in 2008).

Organisation of 8 international workshops and conferences in 2008

Theory group: 15 perm. researchers + 2 associates +13 Ph.D. + 2 postdocs

+ several long term visitors (David Spergel in 2007-2008)

Head : D. Langlois

Main topics of study: string and extra dimension cosmology (J. Mourad, T. Hertog, C. Deffayet,...), cosmic strings (D Steer), cosmological Perturbations, non-gaussianities (D. Langlois), gravitational waves (P. Binétruy, A. Buonanno),...

Young researcher: Evgueny Babichev (since 12/07)

Field: black hole physics, theoretical cosmology

## 3 articles:

- Ultra-hard fluid and scalar field in the Kerr-Newman metric
- Phantm threat to cosmic censorship
- Dirac-Born-Infeld cosmic strings (w/ D. Steer)

APC is also hosting young researchers for extended periods (6 months): P. Jarnhus from Aarhus, D. Battefeld from Helsinki.