

Perez Bergliaffa Santiago Esteban

Position: Professor – Department of Theoretical Physics
Institute of Physics, University of the State of Rio de Janeiro
(Brazil).



I Scientific Work

I work in Gravitation, Cosmology, and Classical Field Theory, in four main lines: $f(R)$ -theories (Cosmology and Black Holes), Inhomogeneous Cosmologies, Bouncing Universes, and Effective Metric in Nonlinear Field Theories.

My CV is available at <http://lattes.cnpq.br/2925938973363409>

II Conferences and educational activities

Conferences and Other External Scientific Work

- “Black Holes”, short course (in portuguese) at the Universidade Federal da Amazônia (UFAM), in November 2009. This course is part of the itinerant Program of Cosmology, Relativity, and Astrophysics, organized by Icrá/Brasil.
- “Aplicaciones de GRTensor en Astrofísica y Cosmología”, 1-week course delivered at the Observatorio de La Plata, Universidad Nacional de La Plata (in spanish), in March 2010.
- Member of the Organizing Committee of the XIV Brazilian School of Cosmology and Gravitation, held at Mangaratiba (State of Rio de Janeiro, Brazil) from August 30 to September 11, 2010.
- “An overview of $f(R)$ theories”, seminar delivered at the XIV Brazilian School of Cosmology and Gravitation.
- “Static and Spherically Symmetric Black Holes in $f(R)$ theories”, talk given at the 9th International Conference on General Relativity and Gravitation (GR19) held in Mexico City in July 2010.
- 15- day visit to the Department of Physics of the Centro de Investigación y de Estudios Avanzados del Instituto Politécnico Nacional (CINVESTAV), to collaborate with Prof. Nora Bretón, in the area of Non-Linear Electromagnetism.
- “La métrica efectiva y sus aplicaciones”(in spanish), colloquium given at the Department of Physics of the CINVESTAV), Mexico City (July 2010).

Diploma thesis supervision

- Marcio Oliveira Pinheiro, Msc student (at DFT/UERJ), working in wave propagation in generalized gravitational theories (Advisor).
- Claudia Isabel Azucena P. Rivasplata, PhD student (at the Brazilian Center for Research in Physics), working in applications of the effective metric (Co-advisor).
- Florencia Anabella Teppa Pannia, PhD student of the Observatory of La Plata, (Argentina), working in inhomogeneous cosmological models (Advisor).

Other Teaching Duties

During this period I taught several courses at the graduate level in the University of the State of Rio de Janeiro, and I delivered the course “Gravitation”, at the PhD level.

Other

- The Agreement between ICRANet and the University of the State of Rio de Janeiro, was signed by the President of the University, Prof. Ricardo Vieiralves, and Prof. Remo Ruffini in 2009. The details of the implementation of the Agreement will be specified in an Addendum, on which I am working along with the University personnel.

- Vice-Director of the Post-graduation Program of the Institute of Theoretical Physics of the University of the State of Rio de Janeiro (from March 2010 to September 2011).

2010 List of Publications

- Author of the chapter "Black Holes" in the book Programa Minimo de Cosmologia (in portuguese), published in Brazil by Editora Jauá (2010).
- Co-Editor of the book Programa Minimo de Cosmologia (in portuguese), published in Brazil by Editora Jauá (2010).