

## Cianfrani Francesco

Position: Postdoc  
Period covered: 2010



### I. Scientific Work

*Publications:*

- ⊙ F. Cianfrani, G. Montani, M. Muccino, "Semi-Classical Isotropization of the Universe during a de Sitter phase", *Physical Review D*, in press, arXiv:1010.5090.
- ⊙ F. Cianfrani, G. Montani, "Shortcomings of the Big Bounce derivation in Loop Quantum Cosmology", *Physical Review D*, 82, 021501(2010), arXiv:1006.1814.
- ⊙ F. Cianfrani, G. Montani, "Gravity in presence of fermions as a SU(2) gauge theory ", *Physical Review D*, 81, 044015(2010), arXiv:1001.2699.

### II. Conferences and educational activities

*II a. Conferences and Other External Scientific Works*

"19th International Conference on General Relativity and Gravitation (GR19)", Mexico City, July 5-9.

*II b. Diploma thesis supervision*

Master thesis:

- ⊙ "Hamiltonian analysis of the Dirac formulation for gravity and ADM formalism" by M. Lulli.
- ⊙ "Study of BRST symmetries in the extended phase space for the spherical-symmetric gravitational field" by M. Renzelli.
- ⊙ "Investigation on the semi-classical behavior of an anisotropic Universe in Quantum Gravity" by M. Muccino.

\Bachelor thesis:

"Polymer quantization and discrete space structure" by M. Letizia.

### 2010 List Of Publications

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