

# Machado de Oliveira Fraga, Bernardo

## *Current Position:*

FAPERJ postdoctoral fellowship at CBPF



## *Previous position:*

- Postdoctoral student at CBPF
- Capes Postdoctoral Student at University of Rome "Sapienza" and International Center for Relativistic Astrophysics Network – ICRANet

## *Outcome Institution:*

IRAP PhD – Erasmus Mundus – First Cycle, 2010-2013

University of Rome "Sapienza" and International Center for Relativistic Astrophysics Network – ICRANet

## *Publications:*

-) Barres de Almeida, Ulisses; Fraga, Bernardo; Giommi, Paolo; Sahakyan, Narek; Gasparyan, Sargis; Brandt, Carlos. Long-Term Multi-Band and Polarimetric View of Mkn 421: Motivations for an Integrated Open-Data Platform for Blazar Optical Polarimetry, Galaxies, vol. 5, issue 4, p. 90 (2017).

<http://adsabs.harvard.edu/abs/2017Galax...5...90B>

-) Fraga, Bernardo M. O.; Barres de Almeida, Ulisses; Gasparyan, Sargis; Giommi, Paolo; Sahakyan, Narek. Time-Evolving SED of MKN421: a multi-band view and polarimetric signatures. Frontiers in Astronomy and Space Sciences, Volume 5, id.1 (2018).

<http://adsabs.harvard.edu/abs/2018FrASS...5....1F>

-) Arsioli, B.; Barres de Almeida, U.; Prandini, E.; Fraga, B.; Foffano, L. Extreme- and high-synchrotron-peaked blazars at the limit of Fermi-LAT detectability: the  $\gamma$ -ray spectrum of 1BIGB sources, Monthly Notices of the Royal Astronomical Society, Volume 480, Issue 2, p.2165-2177 (2018).

<http://adsabs.harvard.edu/abs/2018MNRAS.480.2165A>

-) Turriziani, S.; Fraga, B.; Giommi, P.; A new complete sample of X-ray selected Swift/SDSS faint blazars and blazar candidates, to be submitted to A&A, in preparation

-) Fraga, Bernardo; Giommi, Paolo; Turriziani, Sara A sample of Swift/SDSS faint blazars. AIP Conference Proceedings, Volume 1693, Issue 1, 2015

-) Arsioli, B.; Fraga, B.; Giommi, P.; Padovani, P.; Marrese, P. M. 1WHSP: An IR-based sample of  $\sim 1000$  VHE  $\gamma$ -ray blazar candidates, *Astronomy & Astrophysics*, Volume 579, id.A34, 11 pp., 2015, IF: 5.909  
<http://adsabs.harvard.edu/abs/2015A%26A...579A..34A>

-) Fraga, Bernardo M. O.; Argüelles, Carlos; Ruffini, Remo; Siutsou, Ivan. Semi-degenerate Self-Gravitating System of Fermion as Dark Matter on Galaxies i: Universality Laws, *Proceedings of the MG13 Meeting on General Relativity*, 2015

-) Argüelles, Carlos R.; Ruffini, Remo; Fraga, Bernardo M. O. Critical configurations for a system of semi-degenerate fermions, *Journal of the Korean Physical Society*, Volume 65, Issue 6, pp.809-813., 2014, <http://adsabs.harvard.edu/abs/2014JKPS...65..809A>, IF: 0.445

-) Argüelles, Carlos R.; Ruffini, Remo; Siutsou, Ivan; Fraga, Bernardo. On the distribution of dark matter in galaxies: Quantum treatments, *Journal of the Korean Physical Society*, Volume 65, Issue 6, pp.801-804, 2014, <http://adsabs.harvard.edu/abs/2014JKPS...65..801A>, IF: 0.445

-) Ruffini, Remo; Argüelles, C. R.; Fraga, B. M. O.; Geralico, A.; Quevedo, H.; Rueda, J. A.; Siutsou, I. Black Holes in Gamma Ray Bursts and Galactic Nuclei, *international Journal of Modern Physics D*, Volume 22, Issue 11, 2013, IF: 1.963

-) Fraga, Bernardo M. O.; Argüelles, Carlos R.; Ruffini, Remo. Self-Gravitating System of Semidegenerated Fermions as Central Objects and Dark Matter Halos in Galaxies, *international Journal of Modern Physics: Conference Series*, Volume 23, pp. 357-362, 2013.

-) Fabris, Júlio C.; Fraga, Bernardo; Pinto-Neto, Nelson; Zimdahl, Winfried. Transient cosmic acceleration from interacting fluids, *Journal of Cosmology and Astroparticle Physics*, Issue 04, 2010, IF: 5.634

-) Pinto-Neto, Nelson; Fraga, Bernardo M. O. Cosmic acceleration from interaction of ordinary fluids, *General Relativity and Gravitation*, Volume 40, Issue 8, pp.1653-1662, 2008, IF: 1.668

### *Meetings, conferences, seminars, schools:*

Attendance to the Erasmus Mundus School, Nice, France (09/2010).

Attendance to the 25th Symposium of Relativistic Astrophysics Texas 2010, Heidelberg, Germany (12/2010).

Attendance to the IRAP PhD. Erasmus Mundus Workshop, Recent News from the MeV, GeV and TeV Gamma-Ray Domains, Pescara, Italy (03/2011). Oral Presentation: Cosmological Constraint on 'ino' masses and quantum statistics

Attendance to the IRAP PhD. Erasmus Mundus Workshop, From Nuclei to White Dwarfs and Neutron Stars, Les Houches, France (04/2011).

Attendance to the Erasmus Mundus School, Nice, France (05/2011).

Attendance to the Erasmus Mundus School, Nice, France (09/2011).

Attendance to the 3rd Galileo-Xu Guangqi Meeting, Beijing, China (10/2011). Oral presentation: Self-Gravitating system of fermions as central objects and dark matter halos in galaxies.

Attendance to the XIII Marcel Grossman Meeting, Stockholm, Sweden (07/2012). Oral presentation: Semi-degenerate self-gravitating system of fermions as Dark Matter on galaxies I: Universality laws.

Attendance to the Erasmus Mundus School, Nice, France (09/2012). Oral presentation: Self-gravitating system of fermions as Dark Matter on galaxies.

Attendance to “Current Issues on Relativistic Astrophysics”, Seoul, South Korea (11/12). Oral Presentation: Self-gravitating system of fermions as Dark Matter on galaxies.

Attendance to the 7th Yearly ICRANet scientific meeting on Relativistic Astrophysics on the Occasion of the 50th Anniversary of the Kerr solution of the Einstein’s equations, Pescara, Italy (06/2013). Oral Presentations: Self-gravitating system of fermions as dark matter halos and central objects in galaxies; A multi-wavelength catalog of HSP blazars based on the WISE all-sky survey.

Attendance to the 1st URCA meeting, Rio de Janeiro, Brazil (06/2013). Oral Presentations: Self-gravitating system of fermions as dark matter in galaxies; A multi-wavelength catalog of HSP blazars based on the WISE all-sky survey.

Attendance to the 13th Italo-Korean Meeting, Seoul, South Korea - July 15-19 2013, Ewha Womans University, Oral presentation: Self-gravitating system of fermions as dark matter in galaxies.

Yerevan, Armenia - 1<sup>st</sup> Scientific ICRANet Meeting in Armenia: Black Holes: the largest energy sources in the Universe - 30 June - 4 July 2014

2<sup>nd</sup> César Lattes Meeting “Supernovae, Neutron Stars, Black Holes”, 2015, Niterói - Rio De Janeiro, April 13-18 João Pessoa, April 21, Recife - Fortaleza, April 22

XIV Marcel Grossmann Meeting on Recent Developments in Theoretical and Experimental General Relativity, Gravitation, and Relativistic Field Theory, 2015, July 12-18, Rome, Italy.

-) Quasar at all cosmic epochs, April 2-7 2017, Padova, Italy. Time-Evolving SED of MKN421: a multi-band view and polarimetric signatures.

-) CTA Physics Working Group meeting, April 18-20 2018, Barcelona, Spain. Analysis of DC-1 Extragalactic Data.

-) Black Holes as Cosmic Batteries, September 12-15 2018, Foz do Iguaçu, Brazil. Invited Talk: MAGIC and the very high energy gamma-ray sky