Barres de Almeida, Ulisses

Position: Adjunct Professor
Period covered: 2016

I Scientific Work

My main scientific activities focus on gamma-ray astrophysics and astroparticle physics. In particular, on planning and development of a new gamma-ray detector for the LATTES project, and, as a member of the Cherenkov Telescope Array Consortium (CTA), I am responsible for the optical system of the prototype Large Size Telescope (LST-1). In the MAGIC Collaboration, I serve as member of the publication committee. I am also responsible for the project of the Brazilian Science Data Center (BSDC).

II Conferences and educational activities

II a Conferences and Other External Scientific Work

As organizer:

1. Gravitation, Astrophysics and Cosmology (GrACo III) - LOC

2. IWARA 2016 - 7th International Workshop on Relativistic Astrophysics. - Scientific Committee

3. GROUP 31 - 31st International Colloquium on Group Theoretical Methods in Physics. - LOC

As invited / participant:

1. Astroparticle Physics @ Yachay. Design and expected performance of a novel hybrid detector for very-high-energy gamma astrophysics. (Equador) - invited

2. BRICS Astronomy Workshop 2016 Astronomical Data and Computation.Implementation of a Brazilian Science Data Center (Russia) - invited.

3. CTA Archive Interface Meeting. (Italy)

4. CTA Consortium Meeting (FALL). (Italy).

5. CTA Large Size Telescope General Meeting.Final Report on the Interface Plates Project for the LSTs. (Germany).

6. Gravitation, Astrophysics and Cosmology - GrACo III. Update on the status of the Cherenkov Telescope Array (Brazil).

7. The Lake Baikal Three Messenger Conference. Design and expected performance of a novel hybrid detector for very-high-energy gamma astrophysics. (Russia).

8. Towards a large field-of-view TeV experiment in the South.Large Array Telescope for Transient and Energetic Sources (LATTES).(Brazil).

II b Work With Students

1. M.SC. advisor - Davide Romagnoli. Characterization of an RPC-type Muon detector for the MARTA high-energy cosmic ray experiment. - Università degli Studi di Milano, Centro Brasileiro de Pesquisas Físicas. (concluded)

2. Ph.D. advisor - Bruno Fontes Souto. Studies of the array layout for the Cherenkov Telescope Array. - Centro Brasileiro de Pesquisas Físicas, CAPES. (2013-17)

3. Ph.D. advisor - Saulo Ramalho. Estudo em polarimetria óptica de jatos relativísticos de blazares. Tese (Doutorado em Doutorado em Física-CBPF) - Centro Brasileiro de Pesquisas Físicas, CAPES. (2016-)

II c Diploma thesis supervision

1. Priscilla Behar Jorge. Estudo do Fenômeno de QPO em Blazares VHE. - Centro Brasileiro de Pesquisas Físicas, CAPES. (2016-17)

II d Other Teaching Duties

1. Mini-course at IFCE / Ceará - "High-Energy Gamma-ray Astrophysics"

II e. Work With Postdocs

1. Post-doc supervision - Bernardo Fraga. Centro Brasileiro de Pesquisas Físicas, FAPERJ (2016-)

III. Service activities

III a. Within ICRANet

1. Coordination of the Brazilian Science Data Center (BSDC).

III b. Outside ICRANet

1. Post-graduate course at CBPF - "Introduction to Astroparticle Physics"

IV. Other

2016 List of Publication

Barres de Almeida, U.. TeV Astrophysics: Probing the Relativistic Universe. World Scientific Research, 2017. (in press)

ASSIS, P. ; **Barres de Almeida, U.** ; et al. Design and expected performance of a novel hybrid detector for very-high-energy gamma astrophysics. Astroparticle Physics, 2016. (submitted)

Barres de Almeida, U.; JERMAK, H. ; STEELE, I. ; et al. The RINGO2 and DIPOL Optical Polarisation Catalogue of Blazars. MNRAS 2016. (in press)

For a complete list, please see my Google Scholar profile:
https://scholar.google.com.br/citations?hl=en&user=asoaK5UAAAAJ&view_op=list_works&sortby=pubdate