Cooperation agreement between The Brazilian Federal Agency for Support and Evaluation of Graduate Education (CAPES) and the International Center for Relativistic Astrophysics Network (ICRANet) referring to full doctorate program, visitors program, sabbatical program, and post-doctoral internships, aiming at scientific cooperation in relativistic astrophysics and cosmology.

The Brazilian Federal Agency for Support and Evaluation of Graduate Education, hereinafter referred to as “CAPES”, a Federal Public Foundation, set by law n. 8.405 of January 9th 1992, thereafter modified by law n. 11.502 of July 11th 2007 and ruled by the Statute approved by Decree n. 7.692/2012, registered in CNPJ n. 00.889.834/0001-08, located at SBN Quadra 02 Bloco L Lote 6, 2º Andar , 70040-020, Brasilia - DF, herein represented by its President, Jorge Almeida Guimarães, RG 5579770-2 issued by SSP/SP and CPF in the 048563847-91, resident and domiciled in Distrito Federal;

The International Center for Relativistic Astrophysics Network (ICRANet), international organization that dedicates itself to educational activities and scientific research, set by the Statute signed on March 19th 2003, and approved by the Italian Parliament on February 10th 2005, published in the Gazetta Ufficiale n. 53, on March 5th 2005, located in the Piazza della Repubblica, 10, Pescara, Italy, represented by REMO RUFINI, passport number YA4230027, Director General of ICRANet, according to the ordinance of September 12th 2005, who is duly authorized to perform the activities described in this agreement.

Taking into account the agreement between CAPES and ICRANet;

Keeping the spirit of the CAPES-ICRANet program, based on scientific cooperation in relativistic astrophysics, CAPES and ICRANet agree on adopting further provisions to promote the exchange of students, researchers, and professors, as well as to develop educational activities and research related to astrophysics.

The Parties agree to establish, by mutual agreement and in order to be mutually beneficial, this document:
ARTICLE 1: OBJECT

This agreement has as its main objective to implement the ICRANet program, referred to as "CAPES-ICRANet" in this agreement, with respect to the coordination, inclusion, and formation of students and researches in the research centers associated to ICRANet.

The present agreement refers to the senior scientific researchers of Asian and European ICRANet centers, which will visit Brazilian universities and research centers; Brazilian students aiming at doing their full doctorate abroad, and professors. The visit of Brazilian scholars to ICRANet research centers (post-doctorate) is also encompassed by this agreement.

The present agreement establishes the following programs:

a) IRAP PhD CAPES-ICRANet Program,
   (i) each year five fellowships for Brazilian students will be granted. Each fellowship will last for three years with the final PhD degree jointly delivered by the academic institutions participating in the program.

b) CAPES-ICRANet Visitors Program,
   (i) a visitor program for senior scientists from ICRANet centers in Asia, Europe, and the United States to Brazilian universities and research centers. This program is specially directed to senior scientists who have given fundamental worldwide recognized contributions to the field of relativistic astrophysics and cosmology. During their stay in Brazil, scientists will visit universities and research centers associated with ICRANET. Each visitor can spend up to three years in Brazil and each year up to three months. Five positions will be available each year and the applications are opened during the entire year.

c) CAPES-ICRANet Sabbatical Program:
   (i) a program to promote sabbatical periods in ICRANet centers for university professors and research scientists from Brazil has been established. During their stay in the ICRANet centers, the scientists will be able to visit the universities and research centers associated to the IRAP PhD Program. Sabbatical addressing both theoretical research and observational activities in ICRANet related centers are welcome. Particularly encouraged are research activities synergetic with the IRAP PhD Program through the interaction with IRAP graduate students and Faculty Professors. Each year five positions are established, each one of the duration of one year.

d) CAPES-ICRANet Postdoctoral Program:
   (ii) up to nine two-year postdoctoral positions will be opened every year. The winners will perform the research in any of the ICRANet seats and in institutions with signed collaboration agreements with ICRANet and/or associated scientists to ICRANet.
ARTIGO 2: OBLIGATIONS OF THE PARTIES

In order to safeguard the implementation of the CAPES-ICRANet cooperation agreement, the parties agree to fulfil the following obligations:

I OBLIGATIONS OF CAPES:

a) Publicize CAPES-ICRANet in Brazil;

b) Select the eligible candidates;

c) Allocate financial resources to pay:

   (i) monthly stipend;

   (ii) health insurance;

   (iii) settling-in allowance;

   (iv) travel allowance or the acquisition of a roundtrip plane ticket;

   (v) Operating expenses allowance, exclusively provided to PhD students and paid directly to the recipient of the fellowship.

II ICRANet OBLIGATIONS:

a) Publicize CAPES-ICRANet;

b) To all Brazilians that have been granted CAPES-ICRANet fellowships:

   i) Waive of entrance fees;

   ii) Grant access to laboratories and other facilities of ICRANet centers;

   iii) Give orientation and support to fellows and researches.

ARTICLE 3: WORK PLAN

The work plan, approved by the parties before the signing of the agreement, is an integral part of the present document. The parties agree to strictly follow the schedule laid down in the work plan. Any change in the work plan must be approved by the parties beforehand. The first work plan can be
found in Annex n. 1.

ARTICLE 4: STEERING COMMITTEE

The steering committee is constituted by 4 (four) members: two representatives of ICRANet and two representatives of CAPES. The committee will guarantee the fulfillment of the obligations of the parties and it will meet at least once a year in the most suitable manner, which may include technical visits.

ARTICLE 5: VALIDITY

This agreement shall come into force from the date of signature and it will be effective for five years. The agreement can be automatically renewed for another five-year term, provided that the parties agree on the renewal before the agreement expires.

ARTICLE 6: TERMINATION

This agreement may be terminated by any of the parties, provided that one party formally notifies the other via registered letter at least 60 (sixty) days before the termination is to come into effect. The termination of the agreement shall not affect projects and scholarships already implemented or other obligations taken during the term of the agreement.

ARTICLE 7: FORCE MAJEURE

The parties shall not be responsible for the partial or total non-fulfillment of commitments in case of force majeure.

ARTICLE 8: FINAL PROVISIONS

Issues not explicitly covered in the text of this agreement shall be amicably solved by the parties.

The following attachments are an integrant part of this agreement:
Annex 1 – Work Plan
Annex 2 – Financial detailing of the CAPES-ICRANet cooperation program
Annex 3 - List of research centers that are part of ICRANet.

Executed by the parties on August 27th of 2013, written in Portuguese and English, in two original copies, and duly signed on behalf of the two Parties, in Brasilia, on the August 27th of 2013

Jorge Almeida Guimarães
President of CAPES, designated by ministerial decree n. 122 of the Interior Ministry, published in the DOU on February 9th 2004

Remo Ruffini
General Director of the International Center for Relativistic Astrophysics Network - ICRANet

Witnesses:
ANNEX I
CAPES-ICRANet Work Plan 2013

I – OBJECT

The goal of this agreement is to strengthen the existing cooperation program between CAPES and ICRANet, referred to in this document as “CAPES-ICRANet”, with respect to coordination, inclusion, and formation of students and researchers in the research centers associated with ICRANet, which are indicated in the Annex n. 3.

The present agreement refers to senior research scientists of ICRANet in Asia and Europe, which will visit Brazilian universities and research centers; Brazilian students aiming at doing their PhD abroad and university professors; and the visit of Brazilian researchers in ICRANet research centers (post doctorate).

II – OBJECTIVES

This agreement aims at fostering research on relativistic astrophysics and cosmology between Brazil and the academic centers in Member States of ICRANet. Up to 24 fellowships will be granted in the 2013 calendar year.

III SCHEDULE OF EXECUTION OF THE WORK PLAN

<table>
<thead>
<tr>
<th>CAPES-ICRANet</th>
<th>Deadlines</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Activities</strong></td>
<td><strong>Deadlines</strong></td>
</tr>
<tr>
<td>Selection of students and researchers to take part in the program.</td>
<td>Applications are due the entire year in the website of ICRANet. The link shall be broadly publicized in the website of CAPES.</td>
</tr>
<tr>
<td>Notification to CAPES concerning the fellows and researchers, which have their projects recommended.</td>
<td>During the entire calendar year.</td>
</tr>
<tr>
<td>Implementation of fellowships by CAPES.</td>
<td>Up to 60 days after the notification of the approval.</td>
</tr>
</tbody>
</table>
V – VALIDITY AND TERMINATION

<table>
<thead>
<tr>
<th>Start</th>
<th>End</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date of signature of the agreement.</td>
<td>Five years after the signature of the agreement, which can be</td>
</tr>
<tr>
<td></td>
<td>renewed for another five-year term.</td>
</tr>
</tbody>
</table>
### ANNEX II

**FINANCIAL DETAILING**

<table>
<thead>
<tr>
<th>Programa CAPES-ICRANet</th>
<th>Places per year</th>
<th>Duration (years)</th>
<th>Months</th>
<th>Health insurance</th>
<th>Settling-in allowance</th>
<th>Travel allowance</th>
<th>Operating expenses</th>
<th>Monthly Stipend</th>
<th>Subtotal/ year</th>
<th>Total cost per student</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Full doctorate</td>
<td>5</td>
<td>3</td>
<td>12</td>
<td>€ 1.080,00</td>
<td>€ 1.300,00</td>
<td>€ 2.606,18</td>
<td>€ 189,33</td>
<td>€ 1.300,00</td>
<td>€ 19.586,18</td>
<td>€ 57.762,06</td>
</tr>
<tr>
<td>2 Visitors from Europe to Brazil</td>
<td>5</td>
<td>3</td>
<td>1 a 3</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>€ 4.749,47</td>
<td>€ 17.303,71</td>
<td>€ 42.814,24</td>
</tr>
<tr>
<td>3 Senior Internship from Brazil to ICRANet Asia and Europe</td>
<td>5</td>
<td>1</td>
<td>1 a 5</td>
<td>€ 450,00</td>
<td>€ 2.300,00</td>
<td>€ 2.606,18</td>
<td>X</td>
<td>€ 2.300,00</td>
<td>€ 16.856,18</td>
<td>€ 16.856,18</td>
</tr>
<tr>
<td>4 Post doctorate form Europe to Brazil</td>
<td>5</td>
<td>2</td>
<td>12 a 24</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>€ 2.606,18</td>
<td>€ 2.412,13</td>
<td>€ 31.551,74</td>
<td>€ 55.618,10</td>
</tr>
<tr>
<td>5 Post doctorate from Brazil to Europe</td>
<td>4</td>
<td>2</td>
<td>12 a 24</td>
<td>€ 1.080,00</td>
<td>€ 2.100,00</td>
<td>€ 2.606,18</td>
<td>X</td>
<td>€ 2.100,00</td>
<td>€ 30.986,18</td>
<td>€ 57.266,18</td>
</tr>
</tbody>
</table>

According to the chart above, the total cost of the Program is € 1.094.317,62, for up to 24 students.

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1 The values have been converted to euros in order to allow a total sum.

2 Modalities 2 and 4 will be paid in Brazilian reais according to the exchange rate of the day the money is transferred.
ANNEX III

LIST OF RESEARCH CENTERS THAT ARE PART OF ICRANET.

The following scientific institutions participate in CAPES-ICRANet cooperation program:

1. **Pescara Coordinating Center: I.C.R.A. Network Coordinating Center**
2. **ICRANet Rome**
3. **Villa Ratti, Nice**
4. **ICRANet Brazil: Urca, Rio de Janeiro**
5. **ICRANet Armenia**