AGREEMENT FOR THE INTERNATIONAL JOINT SUPERVISION OF A DOCTORAL THESIS

between

**UNIVERSIDAD NACIONAL DE SAN MARTÍN (UNSAM)**,

Yapeyú 2068, CP 1650, San Martín, Provincia de Buenos Aires, Argentina  
represented by the Rector, Cdor. Carlos Greco

and

**KARLSRUHE INSTITUTE OF TECHNOLOGY (KIT)**,

Kaiserstr. 12, 76131 Karlsruhe, Germany  
represented by the President, Prof. Dr. Jan S. Hesthaven

In consideration of the Specific Cooperation Agreement on Joint Supervision of Doctoral Thesis in Astrophysics between UNSAM and KIT signed on 29 October 2013 this agreement for joint thesis supervision is in compliance with the prevailing regulations in each country, especially the following regulations:

* for UNSAM, Plan the Estudios del Doctorado en Astrofísica
* for KIT, the Promotionsordnung des Karlsruher Instituts für Technologie (KIT) für die   
  KIT-Fakultät für Physik zur Erlangung des Doktorgrades der Naturwissenschaften (Dr. rer. nat.) vom 27.03.2017, (Amtliche Bekanntmachung Nr. 27/2017)
* Gesetz über das Karlsruher Institut für Technologie (KIT-Gesetz - KITG) and
* Gesetz über die Hochschulen in Baden-Württemberg (Landeshochschulgesetz – LHG)

# Title 1 – Research work

This document describes the joint supervision of a doctoral thesis for the purpose of awarding a doctoral degree to **Mr. Paul Filip**, hereafter referred to as “the candidate”. The tentative title of the doctoral thesis is “Improved Aperture in the search for UHE neutral particles & rare events at the Pierre Auger Observatory”.

Thesis work will be jointly supervised by:

* Dr. Diego Ravignani, Instituto de Tecnologías en Detección y Astropartículas (ITeDA)
* Prof. Dr. Ralph Engel, Karlsruhe Institute of Technology (KIT)

The supervisors agree to fully assume their supervising role for the doctorate candidate.

**Title 2 – Administrative procedure**

The candidate has been accepted as a doctorate candidate by the KIT-Department of Physics and by the Instituto Sabato of UNSAM / CNEA.

At KIT, enrollment is in principle obligatory. The candidate is obliged to enroll as a doctorate candidate within a period of two weeks upon receipt of the Doctoral Admissions Committee ́s letter of the acceptance as a doctoral candidate. The obligation to enroll exists continuously for the entire period of acceptance as a doctorate candidate, not only for the period of stay at KIT.  
  
*Exception:* If the candidate is employed full-time at KIT in addition to the doctorate, enrollment will be waived if the candidate objects in writing. (Full-time employment is deemed to exist as soon as the scope of employment at KIT has reached 50% of the regular working hours or more.)

Enrollment fees will be paid to KIT by the doctorate candidate.

The doctorate procedure should not exceed the duration of 5 years (3 years regular duration + 2 years maximum extension). During this time the candidate shall normally undertake two research visits of typically six months each at the foreign partner institution.

**Title 3 – Health insurance**

The candidate has to comply with the rules of social insurance system according to the valid regulations of both countries. The candidate is responsible for obtaining sufficient coverage by health insurance.

**Title 4 – Examination committee**

According to the doctorate regulations mentioned above the examination committee will be composed as described in the annex. It will be jointly assigned by the two institutions.

**Title 5 – Thesis**

The thesis will be written in English. A short summary will be written in English, Spanish and German.

To comply with the regulations of both institutions the thesis will be submitted to both first supervisors (one in each university) prior to final submission as well to a thesis tribunal as described in the annex, who will assess it for suitability and quality. Both supervisors as well as the thesis tribunal will submit a written recommendation that the thesis is passed or failed, and if passed with which grade as stipulated by the regulations mentioned above.

**Title 6 – Oral examination**

There will be a single oral examination in English that will take place at KIT and UNSAM simultaneously by video conference.

The examination committee shall draw up a record of the oral examination in English countersigned by the members of the jury. The oral examination shall be recognized by both institutions. Both institutions will recognize the validity of the examination.

**Title 7 – Grading**

Upon completion of the oral examination, the examination committee decides whether the candidate has passed or failed the examination and determines a final grade by taking into consideration the grades for the thesis and the oral examination. The grade of the thesis and the grade of the oral examination as well as the final grade will be determined by using the grading systems of both institutions stipulated in the regulations mentioned above. Thus, the final grade may be different on the German and the Argentinean certificate.

At UNSAM the grading will be documented in an “Acta de Examen”. At KIT, the Dean of the Department of Physics will issue a certificate (“Bescheid”) with the grading.

**Title 8 – Awarding of degree**

Upon successful completion of the examination requirements, each university will award the doctoral degree / title according to their rules, whereas KIT issues the Dr. rer. nat. and UNSAM issues the Doctor en Astrofísica, but making reference to the degree issued by the other university. In particular, the certificates have to state that the degree has been obtained in a double doctorate degree program. The German certificate will contain the following remark: “This diploma is valid only in connection with the diploma of the Universidad Nacional de San Martín (UNSAM).” The degrees may be used in both the Argentinean and the German form, but only in one form at any given time. The names of both universities can be added in parentheses.

**Title 9 – Intellectual property**

Submission and publication of the thesis as well as the protection of the thesis subject are submitted to the regulations in force in both countries.

Concerning the work results made under this agreement and inventions as well as publications made under this agreement, the parties will amicably agree upon them in a separate agreement.

**Title 10 – Resolution of controversies**

Both parties explicitly agree that any controversy that may arise during the period of validity of this agreement will be friendly solved.

**Title 11 – Miscellaneous**

This Agreement shall enter into force on its signature by the representatives of the institutions and countersignature by the doctorate candidate.

The agreement shall remain into force until the doctorate candidate has successfully completed the examination procedure or both universities agree that the candidate did not meet the examination requirements within cotutelle program, but the longest for 5 years.

The agreement can be modified or terminated by an amendment drawn up under mutual agreement and signed by the representative of each institution.

This agreement is executed in triplicate on the ……. day of……………………… of 2024.

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Prof. Dr. Jan S. Hesthaven Cdor. Carlos Greco

President Rector

Karlsruhe Institute of Technology Universidad Nacional de San Martín

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Prof. Dr. Alexander Wanner Prof. Dr. Guido Drexlin

Vice President Higher Education Dean, KIT Department of Physics

and Academic Affairs Karlsruhe Institute of Technology

Karlsruhe Institute of Technology

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Prof. Dr. Ralph Engel Prof. Dr. Diego Ravignani

Supervisor of thesis Supervisor of thesis

Karlsruhe Institute of Technology Instituto de Tecnologías en

Detección y Astropartículas

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The doctorate candidate