

Professor Bernard F Schutz FRS
Gravity Exploration Institute
14 October 2024

To whom it may concern:

Re: Professor Pau Amaro-Seoane

During my time as a Director at the Max Planck Institute for Gravitational Physics (Albert Einstein Institute) in Potsdam, Germany, Professor Amaro-Seoane worked for 12 years in my Division of Astrophysical Relativity. I hired him after establishing within my Division two major research groups, one in numerical relativity and one in gravitational wave data analysis. I hired Professor Amaro to provide both groups with synergy to the wider field of astrophysics. I encouraged him to support his work by seeking funding outside the Institute, since I had already made long-term commitments of most of the resources of my Division to the first two groups.

Professor Amaro impressed me greatly when he secured a significant funding award from the Deutsche Forschungsgemeinschaft (DFG), amounting to EUR 800,000 over a period of six years. This was exceptional because, normally, DFG prefers to direct its funding towards universities rather than dedicated research institutes like those of the Max Planck Society, which are already supported by substantial baseline budgets. While junior scientists, as Professor Amaro then was, were eligible for DFG funding, the competition was strong and such grants were unusual. That Professor Amaro succeeded in obtaining this grant is a testament to the exceptional quality and originality of his research proposal. I felt it spoke well to the innovative potential of his scientific vision.

I want to stress that the success rate for DFG grants of the size that Professor Amaro won, awarded to junior scientists in Institutes like ours, was very low. To put this into a more familiar context, I would judge that achieving this funding was at least on par with securing a Starting Grant, if not a Consolidator Grant, from the European Research Council. His success demonstrated to me that he was held in high regard by the international peer-review system of the DFG.

Given this impressive success, I decided to form a new research group in Astrophysics under Professor Amaro's leadership. The focus of his DFG-funded research was of course closely aligned with our institute's broader mission in advancing our understanding of gravitational physics and astrophysics. Professor Amaro led this group for the duration of the DFG funding period, not only performing high-quality research himself with his group members, but also contributing materially to the work of the whole Division by organising meetings and creating internet resources. His energetic leadership contributed significantly, in my opinion, to the Institute's international reputation in the field.

Sincerely



Bernard Schutz FRS FLSW MemBNAS



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To
Dr. Pau Amaro Seoane
Institut de Ciències de l'Espai
Carrer de Can Magrans s/n, 08193
Cerdanyola del Vallès
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Prof. Dr. Bernd Brügmann
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Jena, 19.12.2019

To whom it may concern:

This statement I am writing as the former lead-PI of the large research collaboration SFB/TR 7 in Germany from 2005–2014.

I hereby certify that Dr. Pau Amaro Seoane has been a Principal Investigator for one of our projects in Gravitational Wave Astronomy. Dr. Amaro was PI (together with L. Rezzolla) for the grant proposal for Project B10, which he authored and submitted in the framework of the Collaborative Research Centre SFB/TR 7 of the German Research Foundation (DFG):

- „*Electromagnetic Counterparts to Supermassive Black Hole Mergers*“
01.01.2011 – 31.12.2014
Total of 244200 Euro over the full four years.
Funded two postdocs and one PhD student:
Dr. Daniela Alic, Dr. Xian Chen, and Patrick Brem
All three worked directly with Dr. Amaro.

Sincere regards,

Bernd Brügmann



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Santiago, 30/9/19

Certificado

Esta carta certifica que el doctor Amaro Seoane participó como Investigador de Contraparte, representando al Instituto Max Planck de Física Gravitacional, en la solicitud de un proyecto titulado "Red Chile-Max Planck de Binarias de Agujeros Negros Súper-Masivos". La financiación total fue de 15.275.000,- pesos chilenos (aproximadamente 23.000,- €), otorgados por la agencia nacional chilena CONICYT.

Parte de este financiamiento fue utilizado para organizar un congreso en Las Cruces del tres al siete de Marzo del 2014, es decir, una semana hábil de duración.

Dr Jorge Cuadra
Profesor Asociado

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To whom it may concern,

we hereby confirm that while employed at the Max Planck Institute for Gravitational Physics in Potsdam, Germany, Dr. Pau Amaro Seoane has been the PI of an Individual Research Grant ("Sachbeihilfe") awarded by the German National Science Foundation (DFG).

The grant was titled "Supermassive black holes, accretion discs, stellar dynamics and tidal disruptions" and had a duration from 1.9.2013 until 31.12.2016. The total funding volume was 63,815.69 Euros. The participating institutions were:

- Prof. Dr. J. Cuadra (Departamento de Astronomia y Astrofisica P. Universidad Catolica de Chile)
- Prof. Dr. A. Escala (Departamento de Astronomia, Universidad de Chile)
- Prof. Dr. P. Lira (Departamento de Astronomia, Universidad de Chile)
- Dr. S. Komossa (Max-Planck-Institut für Radioastronomie) and
- Dr. R. Decarli (Max-Planck-Institut für Astronomie)
- Dr. M. Dotti (Universit degli Studi di Milano-Bicocca)

Please do not hesitate to contact us in case of further questions.

With best regards,

Florian Keller

Head of Administration

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Xian Chen (陈弦)

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In my capacity as the PI of the “Gravitational Wave-Beijing” research group which consists of members from Peking University, the National Observatories of China, and the Institute for Mathematical and System Sciences of the Chinese Academy of Sciences, I hereby confirm that Dr. Pau Amaro-Seoane is the co-founder this group.

He is currently leading the division of “Gravitational Wave Astrophysics”, and has played a key role since 2017 in recruiting students and postdocs for the group, as well as obtaining funding from the National Science Foundation of China (NSFC), including the support from the PKU-KIAA Innovation NSFC Group (PKING project, 10,000,000 RMB, equivalent to about 1.4 million euros).

Sincerely yours,



Xian Chen

Date: 15 Nov 2022

Қазақстан Республикасының
Цифрлық даму, инновациялар және
аэроғарыш өнеркәсібі министрлігінің
Аэроғарыш комитеті

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АСТРОФИЗИКАЛЫҚ ИНСТИТУТЫ»
жауапкершілігі
шектелуі серіктестігі



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Министерства цифрового развития, инноваций
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To whom it may concern

The acquisition of €1.2 million in research funding by Professor Pau Amaro, conducted at Fesenkov Astrophysical Institute with his remote guidance, represented a remarkable and singular achievement within the scientific community. The success rate for proposals of this nature, particularly those involving a foreign Principal Investigator (PI), is notably low, making this accomplishment exceptional.

Research grants of this scale, especially when awarded to international PIs, face significant hurdles due to the highly competitive selection processes and stringent evaluation criteria. It is exceedingly rare for such proposals to succeed, as they often encounter barriers related to administrative complexities, national funding priorities, and intense competition. The success rate for similar proposals is often compared to the consolidator grants awarded by the European Research Council (ERC), which are known for their prestigious nature, high financial value, and notoriously low acceptance rates. The €1.2 million secured in this instance mirrors both the scale and the competitive rigor associated with such elite funding opportunities.

Professor Amaro, as the PI of this proposal, played a central role in navigating these challenges, demonstrating both the scientific merit of the project and the strategic vision necessary to secure the funding. His collaboration with our institute provided essential institutional backing, facilitating a robust platform for the proposal's development and submission. The support from the agency undoubtedly enhanced the proposal's feasibility, ensuring compliance with the Institute's research priorities while emphasizing the project's potential impact.

Prof. Dr. Chingis Omarov

Director (Fesekov Astrophysical Institute)



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Institute of Space Sciences

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Bellaterra (Barcelona), May 15th, 2025

To whom it may concern,

I declare that Dr. Pau Amaro Seoane, with DNI 22573146A, has been part of the "Equipo de Investigación" of the funded research project of the "Programa estatal de fomento de la investigación científica y técnica de excelencia, subprograma estatal de generación de conocimiento, en el marco del plan estatal de investigación científica y técnica y de innovación 2013-2016", of which I was the Principal Investigator. The reference of the project is ESP2017-90084-P and the title "Spanish Contribution to LISA, ESA's L3 mission" (Contribución Española a LISA, la misión L3 de la ESA). This project received the quantity of 302,000.00 Euros (direct costs) and 1 PhD Fellowship of the FPI program. The project run from January 1st, 2018 to December 31st, 2019 (with an extension up to December 31st, 2020). Dr. Amaro-Seoane contributed to the projects goals: (O3) Theoretical studies for the ESA-L3 Gravitational Wave mission and (O4) Outreach for LISA Pathfinder, LISA, and Gravitational Wave Astronomy.

Sincerely,

Dr. Carlos F. Sopena
Scientific Researcher (*Investigador Científico*) at
the Institute of Space Sciences (ICE, CSIC)