

EDITORIAL

Remembering a passionate Astronomy Education Researcher

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1 In memory of Paulo S. Bretones

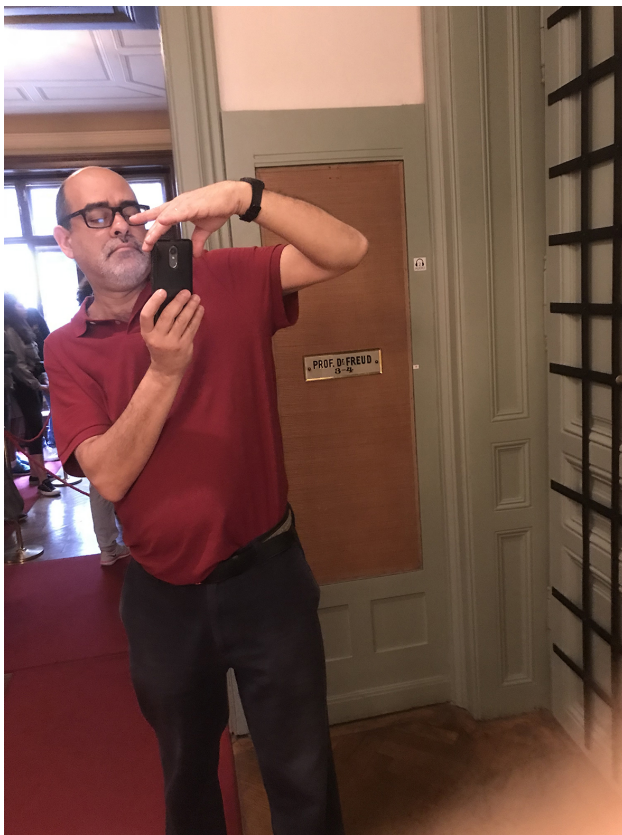


Figure 1. Paulo was also a great photographer and was always ready to take a photo of everything. Photos: Urban Eriksson

I met Paulo S. Bretones for the first time in Vienna 2018 at the International Astronomical Union (IAU) General Assembly. He immediately started talking to me since he had read and found my work interesting. This was the beginning of a very fruitful collaboration that led to us organizing two international conferences, the AstroEdu conferences, first in Garching 2019 and then in Toronto 2023. The conferences have been very successful in bringing together astronomy educators and astronomy education researcher, to present and discuss aspects of both the teaching practice and education research in astronomy; an arena that many of us have longed for where we have a forum to discuss with our peers and colleagues on interesting and intricate matters concerning astronomy education. Paulo was a driving force to make these conferences happened, and I confess that without his energy and enthusiasm they would probably not have taken place.

The situation was similar with the Astronomy Education Journal (AEJ), launched at the conference in Garching 2019, where Paulo and I saw a great need for astronomy educators and researchers to publish their work. At the time, and now, there is no other journal that meets these needs. Paulo was pushing me forwards as new editor together with him, and I learned so, so, much from him. Today the AEJ has published many really good articles and we have a steadily increasing flow of manuscripts; the journal is now well known and colleagues see the importance of publishing there.

Beside all this, Paulo also encouraged me over the years to engage in the IAU and the Working Group for Astronomy Education Research and Practice, a work that over the years led to many contacts and interesting discussions with colleagues around the planet.

Then the pandemic happened... Many activities were put on a hold and the same happened to the AstroEdu conference; we chose not to organize an online conference in 2021. Paulo did not at all like online conferences, so we decided to wait until

2023 for the second conference. It was with great sadness that I, during the end of 2022 understood that Paulo was unwell and by the beginning of 2023 our otherwise weekly meetings ceased. Paulo could not continue the fantastic work he had done. However, and to honor him, I together with colleagues at the University of Toronto and around the world, continued the work with the 2023 AstroEdu conference, something that I am sure Paulo wanted.

I only wish he could have joined us.

Paulo was such an inspiring force for me and I deeply miss our discussions, his dedication to astronomy education, but most of all his humor. We laughed so much during our conversations.

We have all lost a very good and appreciated colleague. Paulo, I miss you deeply and will always remember you. Thank you for all I have learned from you and all the laughter over the years.

May you rest in peace among the stars.

Prof. Urban Eriksson
Uppsala University, Sweden

2 Thoughts from Brazil

Paulo Sergio Bretones and I have been mates for decades in the attempt of sensitizing professional astronomers about the importance of education in the realm of the astronomy research community, because it is frequent that those researchers quite don't understand that astronomy education is an outstanding area of research very different from science research. Education concerns people and requires feelings and procedures not present in the field of pure astronomy research. Paulo was quite aware of these differences and was very active creating and offering arguments, examples and resources to facilitate that more and more professional astronomers understand the importance of elevating astronomy education to the same level of importance as pure astronomy within the structure of the International Astronomy Union (IAU).

We both engaged together in several actions towards promoting astronomy education to the public in general and especially within the Sociedade Astronômica Brasileira (SAB; the Brazilian Astronomic Society). In this last institution, one of the major actions was the creation of the CESAB (Comissão de Ensino de Astronomia da SAB – SAB Astronomy Teaching Commission), which contributed to bring the subject of astronomy education as a regular issue during the annual meetings of that society and to stimulate the presentation of works in astronomy teaching in those occasions. Paulo was a co-organizer of the courses to teachers and outreach actions in the region around the cities where those meetings occurred. Paulo also was one of the proponents of the biannual meeting of SNEA (Simpósio Nacional de Ensino em Astronomia – National Symposium on Astronomy Teaching), which in the due time became an action of SAB in the astronomy teaching field.

One of the great propositions Paulo made to the fields of astronomy education research was the creation of a journal to promote such a research. When he mentioned his idea to me – coincidentally, during a stop of the buses that were taking us to one of the annual meetings of SAB – I joined up at once and gave all the incentive to create such a journal immediately. In that same meeting, our colleague Jorge Ernesto Horvath joined us. That journal, however, it is important to say, have no connection at all with SAB; it was an independent initiative of the three of us. It was devised to be an electronic journal adopting the procedure of “double-blind peer review” with general free access. We began to work in the idea and about one year later

the Latin-American Journal on Astronomy Education (RELEA, for Revista Latino-Americana de Educação em Astronomia; find its homepage at <https://www.relea.ufscar.br/index.php/relea>) was launched containing a first call-for-papers and information about its goals. It soon became the most important journal in that field not just in Brazil but in the Latin-America region and beyond.

In 2016 we published in the Journal of Astronomy & Earth Sciences Education (December 2016, Volume 3, Number 2, Pages 111-124) an account of the first 10 years of RELEA (which can be found in <https://clutejournals.com/index.php/JAESE/article/view/9844/9939>). I declined from the editorial board of RELEA sometime after that article to dedicate myself to other projects. Paulo and Jorge kept editing the journal. Paulo will be greatly missed in the conduction of the journal. RELEA is one of many of his very important legacies for the sake to promote astronomy education research as a field in human sciences, that is what it is in fact. Despite this terrible loss, RELEA keeps running and will keep accepting articles and publishing.

We hope that Paulo's great example will work for the benefit of teaching astronomy from a humanities perspective and continue to benefit new generations of educator astronomers everywhere.

Dr. Luiz Carlos Jafelice

Excerpt from Jornal de Valinhos (posted on Facebook) - Paulo Sergio Bretones

"He was an incredible father. A sensational man. Courageous, fearless, driven by a passion for the sky and for astronomy education"

—Paulo's son Ricardo.

Professor Bretones had a degree in Chemistry, a master's and doctorate with themes related to astronomy education, from Unicamp (State University of Campinas), in addition to being a lecturer and author of books in the field of astronomy, and a professor at UFSCar (Federal University of São Carlos) since 2009.

He was also the creator of the project "Astronomy Day in Schools", developed by him since the 1980s and which, in Valinhos, was a model when carried out in the municipal education network between 2008 and 2009, under the management of then mayor Marcos José da Silva (MDB).

Paulo also idealized the "Sundial" of the CLT (Workers' Leisure Center) Ayrton Senna da Silva, inaugurated in 2011, also under the administration of then Mayor Marcos.

The love for astronomy made him travel to various destinations around the world such as China, Hawaii, Prague, Iran, Italy, South Korea, Germany, among others to give lectures on astronomy and exchange experiences with researchers.

In addition to his work in schools, Professor Paulo contributed many articles in the Jornal de Valinhos on the subject of astronomy.

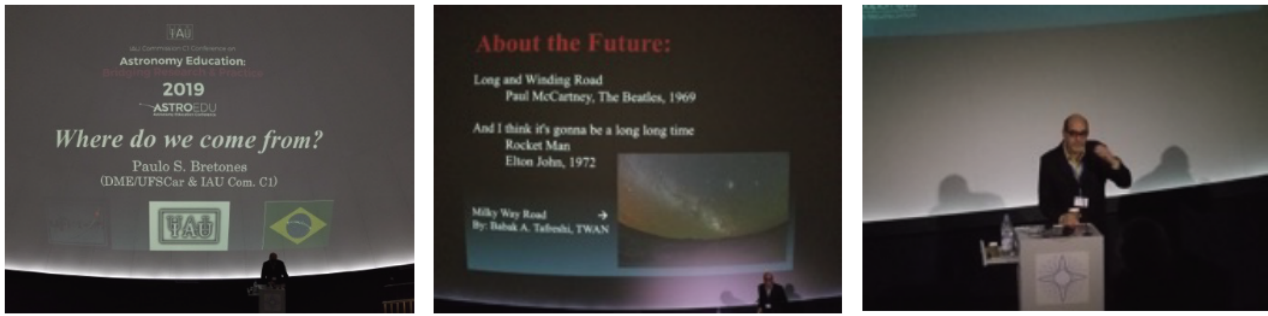


Figure 2. Paulo presenting at the inaugural AstroEdu Conference 2019. Photos: Masafumi Matsumura

3 Thoughts from Japan

It was a shock to hear the unexpected news of Prof. Paulo S. Bretones's passing. I met him at the meeting of the IAU conference on "Astronomy Education", at Garching in 2019. That conference was the only time I met him, but I cannot forget his enthusiasm on astronomy education, his phrase that

"we will make history (on astronomy education)"

still moves me a lot.

May he be rest in peace in heaven.

Masafumi Matsumura

Thank you, Paulo

Paulo always showed me and showed us new paths. He was a great person of passion with a very warm heart.

Paulo always spoke gently and humbly. After his short text, which was frequent, asking me if it was okay now for only 5 minutes, usually we had a conversation over telecon that lasted 50 minutes instead of 5 minutes! Hey Paulo, you said only 5 minutes, but... of course, fine, it was always a pleasant conversation with a lot of laughter. He was always full of passion for education, especially in the field of school teaching, and its international networking.

He was one of the founding members of AstroEdu conference, one of the founding members of the Astronomy Education Journal, and launched and greatly expanded the idea of ADiS, Astronomy Day in Schools, and created a place for us to interact with smiles on our faces. With his passion, I organized the ADiS with Paulo and other collaborators, where many teachers and practitioners attracted by Paulo's warm personality came together.

I was left with several research topics that we had promised to collaborate on. I would have liked to have received more advice from him.

My sincerest condolences. May he rest in peace.

Tomita, Akihiko

4 Thoughts from Canada

I was deeply saddened to hear of Paulo's death. I had not seen him for many years, and was looking forward to seeing him at AstroEdu 2023 in Toronto. Sadly, it was not to be; may he rest in peace, and his memory live on.

I was very active in IAU education and development for three

decades, starting in the 1970's. Paulo and I met and interacted often at IAU conferences and general assemblies. He was one of dozens of "kindred spirits" who made international astronomy education so inspiring for me. For both of us, education and astronomy were equal parts of our professional lives. And he was not only enthusiastic, he made things happen – the RELEA Journal, among other things. I will remember him well.

John R. Percy

**Professor Emeritus: Astronomy & Astrophysics, and Science Education
University of Toronto**

5 Thoughts from Greece

I had met Paulo since 1996 through his involvement in IAU Commission C1 for Astronomy Education, his experience, knowledge and passion on the field in addition to his involvement and co-operation with the International Astronomical Union, really enhanced astronomy education world-wide.

His consistent, educational activities, capacity in collaboration and good manners, as well made him visible world-wide being a member of C1 Organising Committee on Astronomy Education.

The main characteristic of his work was penetration, successful complementation and reaching awareness to the target audience.

As well his presentation in conferences and workshops was remarkable by having great contribution for the area.

It is a great loss either for Astronomy, but as well for all of us who were his colleagues all those years.

Metaxa Margarita

Greek co-NOC

6 Thoughts from Thailand

Paulo Bretones was a person who advised and inspired me how to promote Astronomy Education in the Southeast Asia region when he was a President of the IAU Commission C and also one of the founders of an IAU successful project on "Astronomy Day in Schools, ADiS". I, as a President of the Southeast Asia Astronomy Network (SEAN) and currently a President of IAU Commission C1, have conveyed and implemented his advice to the Southeast Asian community. At present, Astronomy Education became an effective tool in distributing educational opportunities thoroughly in the Southeast Asia region.

Boonrucksar Soonthornthum

President of IAU Commission C1

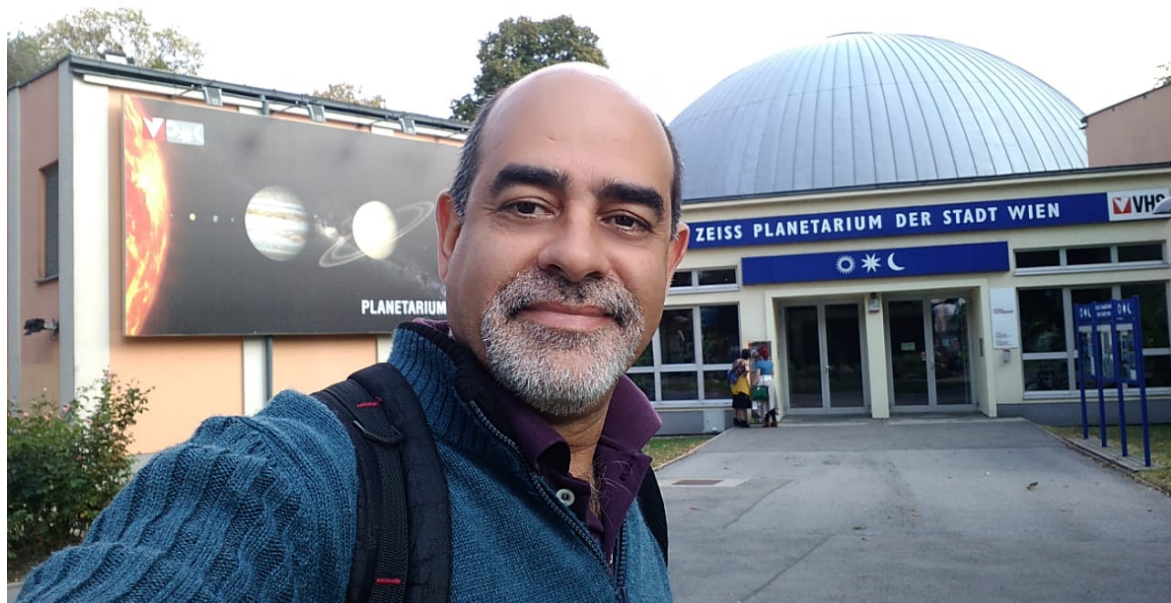


Figure 3. A passion for experiencing and communicating the Universe. Photo: Paulo Bretones' wife Ana Lucia

7 Thoughts from Romania

Astronomy education has lost a man, a professional and a model in the field of its promotion. I knew him as a tireless friend of the "Astronomy Day in Schools, ADiS" project. Respect for all his work!

Naghi Elisabeta Ana
NAEC, Romania



Figure 4. A passion for the sky and telling stories. Photo: Paulo Bretones

8 Thoughts from Iran

Paulo has made an undeniable effort to promote and develop a strong education for the public especially among the astronomers. I met him very late, but I spent a memorable time with him. We traveled together and I learnt so many wonderful

lessons from him. I haven't just lost a friend. I lost a great teacher.

Mahdi Rokni
Manager of Students' International Network for Astronomy - SINA

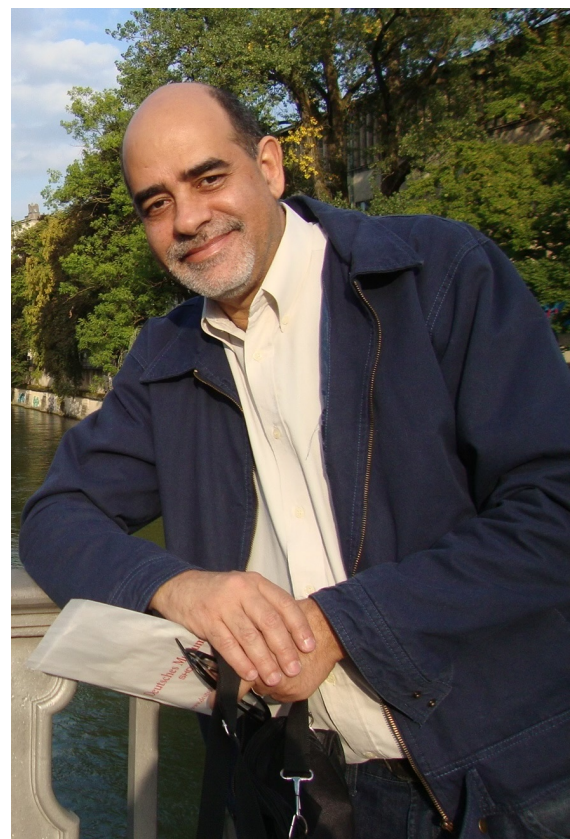


Figure 5. Always smiling for the camera. Photo: Paulo Bretones' wife Ana Lucia