Interview with Prof. Pedro Russo, Leiden University, The Netherlands

⇒ **Could you share what initially inspired your journey into astronomy, and how you came to specialize in the intersection of astronomy, communication, and society?**

That's a very broad question. I've been working in the field of astronomy communication for more than 30 years, so it's a long story. In fact, my interest started almost as soon as I began my university career—and even before that.

I grew up in a very rural environment, in the countryside, with beautiful dark skies. I spent a lot of time simply looking at the stars. When I was about 11 or 12 years old, I saw a shooting star—a meteor—and I became extremely curious. I wanted to understand what it was, so I began looking for information. I discovered astronomy books in the public library and started developing a deeper interest in astronomy.

Later, when I began studying astronomy at university, together with some colleagues we created a student group focused on astronomy outreach. We started organizing small activities related to astronomy communication. Through this experience, I became very interested in outreach and education, and that's how my career in astronomy communication and astronomy education began.

My main interest lies in the connection between astronomy and society—the many ways astronomy interacts with people beyond the scientific community.

Prof. Pedro Russo
Credit: NAMES 2024

⇒ **You led the largest science outreach campaign ever—the International Year of Astronomy 2009. Looking back, what were the key lessons from coordinating such a vast global network, and what do you consider its most lasting legacy?**

Yes, I was the global coordinator of the International Year of Astronomy 2009. It was an initiative of the International Astronomical Union, carried out in collaboration with UNESCO and endorsed by the United Nations. It was certainly one of the largest projects I have ever been involved in.

One of the key lessons we learned was the importance of balancing global coordination with local initiative. The project worked because it provided an open platform—anyone could participate, and people from all over the world could organize their own activities and join the celebration.

At the same time, we also created what we called "cornerstone projects," which provided a common framework and vision. These included initiatives such as teacher training programs, Astronomy and World Heritage, and Astronomy for Development. They connected activities worldwide while allowing local communities to adapt them to their own contexts.

The long-lasting legacy of the International Year of Astronomy is that much of the global infrastructure we have today in astronomy education, public engagement, and development actually began during that year. For example, the network of National Outreach Coordinators (NOCs) and many teacher-training initiatives were launched at that time. Programs such as the Galileo Teacher Training Program and networks of astronomy education coordinators also emerged from those efforts.

Many of these initiatives are still active today. In fact, in Armenia, several of the programs developed at the Byurakan Astrophysical Observatory related to astronomy and society trace their origins back to that period. Seeing this legacy continue more than a decade later is something that makes me very proud.

⇒ **You currently coordinate the Astronomy & Society group at Leiden Observatory. What are the current priorities or flagship projects of the group?**

About three years ago, we revised our strategy. For many years we focused mainly on practical implementation of astronomy education and outreach programs.

One example is the Universe Awareness program, which aimed to introduce young children to astronomy and use it as a tool for science education and global citizenship education. We were also deeply involved in developing exhibitions and public programs for the Old Observatory in Leiden.

However, after the pandemic we decided to shift our focus toward two main directions.

First, we are now conducting more research on how astronomy is used outside academia. This includes studying astronomy education, communication, and public engagement to better understand what works, what doesn't, and why. In a way, we are developing a more research-oriented approach to astronomy communication.

Second, we focus on supporting international networks related to astronomy. For example, we host the European Regional Office of Astronomy for Development, working closely with our sister office in Armenia. Through this network, we help identify ways to support the astronomy community and strengthen its social impact.

We also collaborate closely with the International Astronomical Union. One member of my team works specifically on fundraising for the IAU, helping to support initiatives related to education, public engagement, and development.

In addition to this work, I also teach courses at Leiden University related to astronomy communication.

⇒ **How do you see the role of science communicators evolving in the era of digital platforms and misinformation?**

Prof. Pedro Russo
Credit: Leiden University

That is a very complex question. One thing I believe scientists—and especially astronomers who enjoy communication—should do is simply be present.

I say this while acknowledging that I myself am mostly active only on LinkedIn. I'm not very active on other social media platforms. But I do think it is important for scientists to be present online, creating content and sharing knowledge about astronomy and science in general.

It is important that this content is accurate and scientifically sound, but also engaging and emotionally meaningful for people. Unfortunately, research shows that misinformation and mistrust in science are very complex issues. They cannot be solved simply by providing more information or education. However, people need reliable content if they are to trust science. So scientists should communicate more actively and participate in digital platforms where conversations about science are happening.

⇒ **As a professional in science communication, what recommendations would you give to institutions like the Byurakan Astrophysical Observatory to strengthen their position in the global science communication ecosystem?**

This is a multilayered question, because institutions can contribute through education, public engagement, and development. In fact, Byurakan Astrophysical Observatory is already a very good example of how an institution can successfully invest in these areas, particularly in topics related to astronomy and society.

My first recommendation is not to be afraid to invest resources in outreach and communication. Many scientific institutions feel underfunded, and often the first areas where budgets are reduced are education and public engagement. In my view, this is a mistake. In the long term, these investments strengthen public support and political support for science.

Research suggests that if an organization invests around five to ten percent of its budget in public engagement, the results can be very significant.

Second, institutions should develop clear strategies for communication. Decide what your priorities are: public events, media engagement, social media, educational programs, or a combination of these. Research shows that strategic planning significantly increases impact.

Third, institutions should encourage their scientists to communicate. The public wants to hear directly from scientists, not only from professional communicators. Creating incentives and support for scientists to share their work with the public is therefore very important.

Finally, institutions that wish to have greater international impact should communicate in English as well as in their local language. This allows their work and initiatives to reach broader global audiences.

And of course, participating in international conferences and networks is essential. Presenting your work, sharing experiences, and bringing international initiatives to your country are all ways to strengthen your presence in the global science communication community.

Interview conducted by Lilit Darbinyan
Press Secretary of Byurakan Astrophysical Observatory (BAO)
Newsletter Editor of Armenian Astronomical Society (ArAS)