

GETTING TO KNOW TEQ'S MEMBERS

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How did you choose your field of studies?

I have always been very curious about how and why the things that I experienced behaved as they did. As a child, I would many times prepare simple naive games (experiments) with ropes, wheels, sticks, balls... and a part of me was always, maybe unconsciously, trying to guess the rules behind the motions that I could see. Later on, I got to know that many people before me dedicated their lives precisely to this task, building up a whole discipline called physics. Then, despite other passions I have, I knew my destiny.

Can you briefly introduce yourself and your work?

I am a theoretical physicist from Spain. I did my studies in my country of origin until the PhD, and then started to work as a postdoc in Vienna, both at the University of Vienna and at the Institute of Quantum Optics and Quantum Information. My work is mostly focused on Quantum Fields in Curved Spacetime. This is a branch of theoretical physics that studies quantum fields (such as the electromagnetic field), described by quantum mechanics, which propagate in a curved spacetime, due to gravitation, described by general relativity.

What do you mostly like about your research? What are the challenges?

Despite all the sophistication and complexity of modern theories and experiments (which many times beat what once was science fiction), in my view, the best of doing research remains the same as in the Pre-Socratic times, the same as ever: To wonder for explanations about the world we see, and to come up with answers. Maybe the hardest challenge is,



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today, not to fully forget about this simple fact in the competitive environment of current society.

What advice would you tell students who want to become scientists in the future?

I'm not a fan of giving general advice, because everyone has his/her own path. Just from my experience: Explore and take your time to decide what you really like of science, and then go for it. No one knows if you will be able to dedicate yourself professionally to that (none of us takes this for granted). But at least give it a try, get as far as you can; and, most importantly, enjoy while doing it. And, professionally or not, never curtail your curiosity about nature!



Luis Barbado pictured in Vienna, the city he has chosen to continue his postdoctoral studies.