

Discours d'Anne L'Huillier lors de la Cérémonie de la remise des diplômes de Master de Physique 2024

“Dear Dean of the graduate school in Physics of the Université Paris-Saclay, graduates, chers étudiants, ladies and gentlemen, it is a great honor for me to give this speech to you, new graduates of the physics master of Université Paris-Saclay. Let me start by congratulating you! Félicitations! You made it!

I completed a physics master's like you. Three differences: it was in 1979, 45 years ago, it was at Université Paris VI, which I guess now is Université Paris-Sorbonne and at that time there was no graduation ceremony! The reason why Université Paris-Saclay is very special to me, which is why I accepted Sophie Kazamias's invitation is that my first research years, first as a PhD student, and then as a young scientist were done at the CEA, just a few km from here.

Based on my own experience as graduate in physics, what can I tell you that could inspire and guide you for your future career, whether in academia, in industry, or elsewhere?

I would like to focus on four messages:

Message 1: Grab opportunities. During a career, opportunities may arise because of an unexpected result at your workplace, a job offer, or an innovative idea. This happened to me when I participated in a scientific experiment in 1987. We discovered, by chance, the phenomenon of high-order harmonic generation, the base behind attosecond pulses for which I got the Nobel Prize in Physics 2023. I had the feeling and intuition that this was an interesting phenomenon. I decided to make it my research topic. I grabbed this opportunity, and it has affected my whole career. Be sure you recognize opportunities when they appear; if they seem interesting, grab them!

Message 2: Be persistent. You will meet difficulties and you will experience failures. Work will not always be fun and easy, but don't give up! This is key to success much more than to be smart or creative.

The research leading to Nobel prizes often requires persistence for decades. Right after high-order harmonics were discovered in 1987, we thought that they could lead to attosecond pulses, but we did not know how to measure them. We tried different ideas but none were working. I was quite close to giving up. After many years of effort, in 2001, Pierre Agostini and Ferenc Krausz, my two co-laureates of the Nobel Prize managed to measure attosecond light pulses for the first time. You might not aim for a Nobel Prize, but I am sure that whatever you will do will require persistence, and might not be fun every day. Be prepared for it.

Message 3: Take care of people. You probably think, on this graduation day, that you will work with experiments, instruments or computers. You will work mainly with people. Your success will depend on how well this group of people will work together as a team, help each other, and complement each other. The best group working with you will not be made of copies of yourself but more likely of people with different backgrounds, ages, genders, life situations, and with different expertise. Listen to them and be open and inclusive. This is how you and your team, will find the strength to overcome difficulties.

Message 4: Aim for a balanced life. After several years at Université Paris-Saclay, you have done so much more than only study. Work is not everything. When I got the Unesco-L'Oréal award for women in science, in 2011, I met great women scientists from other continents, America, Asia, and Africa. Many of them had to choose between making a career in science or taking care of a family. I found that choice horrible. Since then, I have tried to convey the opposite message, especially to girls! Don't choose between family and career, combine! I know it is possible.

In summary, grab opportunities, be persistent, take care of people, and aim for a balanced life. Let me congratulate you once again and wish you all the best for your future.”