



US-ELTP Career Profile

Marie Lemoine-Busserolle

NSF's NOIRLab Systems Scientist



"Trust me, I have the will."

During Career Day at school, 12-year-old Marie Lemoine-Busserolle wrote that she wanted to be an astronomer, having been inspired by a documentary. After being told to *"be more realistic"* by her teacher, Marie's grandmother said, *"There is nothing that you cannot do, we will always support you, you just need the will."* Today, Marie has her PhD in astrophysics and is the Systems Scientist at NOIRLab for the US Extremely Large Telescope Program.

As a Systems Scientist, Marie uses her astronomy expertise to aid the technical team and help develop services (system software) needed to support researchers utilizing data from the Giant Magellan Telescope and the Thirty Meter Telescope.

How did you become interested in science?

I was interested in astronomy at a young age and by the time I was 14 I asked for my own computer. In Martinique, the only people buying computers at the time were businesses. My parents always did what

they could to support me, and when they realized I wanted a real computer, not just a toy, my mother took out a loan to buy me my first computer. I knew I wanted to continue my education after high school, so I investigated universities and filled out the applications on my own. I ended up attending the Université de Toulouse, in the Department of Science and Technology. Here I was a minority with only two other black people taking classes in this department. It is very rare to find other people like me in astronomy with such a diverse background.

What were some of the challenges or opportunities you faced along the way?

One opportunity I am grateful for was getting a position at the UK National Gemini Office at the University of Oxford. A memory I will always have from Oxford was when the receptionist asked why I always smiled. In response, I said, *"People told me I would never be what I am right now. So every time I go to work in the morning, I am so thankful. I fully know where I come from. Why should I put myself down, if the entire world is doing that already?"* The receptionist and I became friends after that.

As far as challenges go, I know times are hard, but if I am not one of the people who change it, then my daughter

Fun Facts



I enjoy being with my daughter and doing astronomy.



I love the Japanese culture. I used to be into Manga and Japanese painting.



I enjoy film festivals.



When I lived in France, I would attend live-action role-playing events and dress as characters from the Lord of the Rings.

will experience the same things in life. I have to be the woman who stands up. I have to do my tiny bit, even if it is to be an example for her so she can have a better life than I had.

Do you have any advice to share with students?

Challenges will come, things will not be easy, and it is important to stay realistic. Face any challenge as

an opportunity. On my desk is a Post-it I look at daily: *"What is great about this situation that I am not seeing right now? What did I learn? How can I get ahead?"* It is not easy to know what you want to do in life. If you are lucky and know what you want to do in life early on, or if you are happy to put the energy into figuring it out, you need to hold on to it and fight for it. In turn, you will be happy doing what you love.

Marie's Pathway to NOIRLab's Systems Scientist

