Name of the MSC Fellow: Gizem Şengör
Nationality: Turkish
Host organisation: CEICO, FZU Czech Academy of Sciences
Country of the host: Czech Republic
Project Acronym: SymAcc
Project start and end date: 1 October 2019 – 30 September 2021
Type of MSC action, H2020: IF

Your story:
Project objectives and research field:
We are aware of two epochs in the history of our Universe where it undergoes accelerated expansion. The geometry of the Universe during these two eras resembles that of de Sitter space, which has the maximal number of space-time symmetries allowed. Through SymAcc, I investigate the nature of cosmological degrees of freedom during these epochs and their connection to de Sitter geometry.

Tell us why your topic is important and/ or how it brings to advancement in your research field
My project is at the interface of two disciplines: we address questions relevant to Cosmology, using techniques more often used in holography, an area of High Energy Theory. We are rephrasing cosmological statements in such a way that can enable a better comparison between different physical phenomena, but also help to move forward the holographic techniques and extend their range of applicability.
What are the benefits of participating in an MSC action?
I enjoy raising my own questions and seeing how they lead to new ones as the project evolves. During the project my decision-making skills have been improving, I am becoming more independent and I began shaping my future research programme. The MSCA-IF action also has societal responsibilities. In the past, I have joined outreach activities but never initiated any. Thinking on how to express the nature of my work to a broader audience led me to think about what I am doing from very different angles. It also led me to think more about the society. My research is purely theoretical yet in the long run, all kind of research becomes part of human life. Galileo’s work on the motion of bodies under gravity led to the grandfather clock. The GPS satellites of today rely on Einstein’s principles of relativity to work properly. In discussing my work, I also emphasize the nature of scientific thinking.

Did you encounter any challenges during application/implementation and did you get any help?
In preparing the application, which makes one think on various aspects of the scientific work, the host institution was very helpful towards explaining the template and making sure my writing was concise. The COVID-19 Pandemic created problems in the implementation stage, especially towards the dissemination of project’s results, both scientifically and to the public. Eventually, the scientific community moved to online platforms. I have been attending online journal clubs, lecturing at seminars and workshops and establishing new bonds across the world since then. At present, I am one of the organisers of our online seminars at CEICO. I had to re-evaluate my outreach plans too. I thought creating a movie on my work would be the best strategy given the circumstances. Since its screening on YouTube, the movie has received many positive comments. Link: [https://www.youtube.com/watch?v=C7S7uGV-l10](https://www.youtube.com/watch?v=C7S7uGV-l10)

Why did you choose a widening country as a Host? What was the reason that convinced you? What is making you professionally happy here?
I did not give much consideration to the fact that the host country was a widening country. The professional advantage of the host institution is the fact that it has researchers from both disciplines relevant to my project. I also enjoy the extent of freedom in posing scientific questions I continually observe the widening countries to possess.

Would you recommend others to apply? What useful advice/tips can you give them?
The widening countries provide a pressure-free scientific environment. This really allows one to focus on their own scientific interests. Both the scientific community and administration work very hard here. I see administrative efforts continuously trying to raise the standards. My institute currently holds the European Commission
HR Excellence in Research Award, and hosts several MSCA fellows. I definitely recommend others to apply and advise them to search for a creative scientific environment that will suit them best.