## Moscow Physics Trip 2019 by Joanna Crane

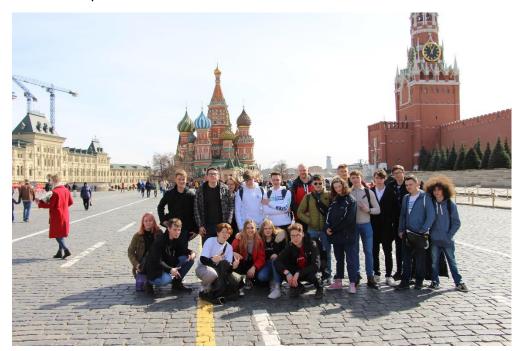
Having returned from Moscow this time last week, I have just been reflecting on what an incredible experience I had. Thanks to your funding, my eyes have been opened to the vast scale of space explorations. In particular the engineering feats that have enabled the cutting-edge scientific discoveries that allow us to better understand the existence/sustainability of our planet.

Culturally, many Russians that we spoke to and had tours from appeared to pride themselves on the legacies left by cosmonauts of the past, embracing them as part of their nations' heritage. This passion for astronomy was contagious and allowed us to be completely immersed in every feat and mission that we learnt about.

On our first day we visited the museum of cosmonautics, where we discovered the progression of Russian space discovery. This ranged from the first successful satellite (Sputnik 2) to orbit space with an animal (Laika the dog) on board, to the numerous failed missions costing lives – before engineering techniques were perfected. This ensured that astronaut safety and training then became the highest standard attainable, so that complex procedures such as space walks could occur, using space suits with specialised internal conditions for human survival.

Following this, we visited a full-scale model of the space station Mir – a fully functional Soviet/Russian station that was in operation between 1986 and 2001. On board this

model we were able to experience the intricate pieces of equipment that had been developed (such as magnetic tooling tables for technician work in zero gravity conditions), providing a true understanding of what life as an astronaut entails.



We also visited Yuri Gagarin's desk, learning about all the achievements that the world-famous scientist had achieved.

A project that he was closely related to was the Vokshod 2 spacecraft, in which Alexey Leonov performed humanity's first spacewalk. The spacecraft has been impeccably preserved and protected, so standing next to it and learning about that missions was an experience that I will never forget.

Walking in the footsteps of internationally renowned astronauts, engineers and scientists was an unforgettable experience. It has, without doubt, provide to me that a career in a field that's research is grounding, leaving legacies for generations to come is one that I want to be able to enjoy and make a difference in. For that, I cannot thank you enough.



