Sky gazing in the Alps

The Rosette molecular cloud, seen by Herschel

Between 18-29 of July 2011, the European Space Agency considered it is high time people gazed at the sky in order to create four new ideas of study for the topic of Star Formation. Therefore, 58 students, both graduate and undergraduate, were selected from across Europe and 12 of the most prominent experts in the field were summoned in order to provide the lectures, expertise and tutoring required for the task at hand. The participants were split into four teams and their goal was to suggest, analyze and design a space mission able to take one step further the knowledge on the topic of Star Formation across the Universe. All these, combined with the exquisite location in the Austrian Alps gave birth to the 35th edition of the Alpbach-Tyrol Summer School on space related topics.

It lasted two weeks out of which 10 intensive working days, each having a 16 hours' work load. Despite the strenuous program, there were, however, 2 free weekend days, catalogued by the organizers as "free time but very useful for work", and I must say, they were useful.

The village of Alpbach

About 30 percent of the schedule consisted of lectures ranging from the science involved in Star Formation and the Engineering problems raised by a telescope-spaceship all the way to means of managing and storing the resulted data from space missions. The other half consisted of guided workshops under the supervision of two members of ESA's Staff, one responsible with the science and the other with the engineering aspects.

Students at the Alpbach Summer School 2011

The entire project developed rapidly and had to pass successfully a scientific review, an engineering review as well as a final mission review which means that team work and devotion to the job were of paramount importance in order to complete the job.

I dare to say that my team's objective has been the most daring of all, proposing a formation flying far infrared interferometer in order to study the collapse of the high mass stars, their protostellar disks as well as the magnetic field in the high mass cores in order to better understand how exactly stars are formed. As a result of our efforts team RED of which I was a member was awarded the Nobel for the best science case as well as the Prize of the Jury's Chairman who described our proposal as: "definitely the way forward in Star Formation Exploration".

However, Alpbach wasn't always about work. It was also a place for different people with common goals to meet once and remain friends forever, a place where the horizons of the participants went further thanks to the experience of our beloved tutors and last but not least a most pleasant and hospitable location thanks to our hosts who took care that we have no other worries except for the observatory that we were building.

Thanks to this unique opportunity I had the chance to blend in and understand how a team of scientists and engineers have to work together in order to reach their goal and respect tight deadlines. Moreover, I have developed my understanding of propulsion and space systems in the context of space missions which increased my determination to research and discover higher performance, more reliable and cheaper technologies for orbital launchers and aerospace systems in general. This is why I wish to finish my studies at The University of Manchester, meet people around the best research establishments worldwide and with the proper mixture of effort, faith and luck achieve what I envision.

In the end, I wish to say that I could not have been a part of this event without the help of Dr. Alistair Revell and Dr. Kate Smith together with the department of MACE within The University of Manchester who supported my expenses related with the summer school, therefore, contributing to my development as a professional but especially as a person.

For giving me the chance to shine, I would like to thank you!

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