Bruxelles - Motivation letter for this activity

I am 21 years old and studying Technical Mathematics at the Technical University of Vienna.

Since I have been a little child, I have loved numbers and maths and I was very fascinated by this amazing world!

However, I have also a big interest in traveling and meeting new friends all over the world. Especially European cities are very beautiful and there is hardly nothing better than explore narrow streets and learning a new culture together with locals.

Furthermore, I have had a presentation at school about quantum mechanics a few years ago and was very amazed about that topic. I have learned much more and read a lot of books about it since that presentation and my fascination is not gone get.

I also want to take some physic and quantum theory courses at my university in the next semesters, so it would be a perfect combination of learning a new scientific topic and explore a new country like Belgium at the same time.

I have never been to Belgium before, so I think it is time to do! I am looking forward to seeing the Atomium, walking through the Grote Markt and visiting the Manneken Pis. Of course a little piece of the legendary Belgian chocolate and a portion of Belgian fries is a must! Culture and Eating, what could be better? ;)

I have absolutely no problems to getting in touch with new students and I hope that some friendships will endure the time of the course. Working in groups and with others is no problem for me and my friends describe me as a warm-hearted and friendly person and my smile is catching!

I am very open-minded and you will never get bored if I am with you. I am always funny and I do not miss a chance for a joke, so I am an absolute boost for every team!

In my free time I love being together with my friends, going to the cinema, reading or play with my dogs. And you will never find a better joke teller than me!

So if you are convinced that I am the right person for the course, my work is done and I am looking forward to meeting you and going to Bruxelles!

Salut and see you in November!

Activity specific questions

Explain the Schrodinger's cat thought experiment: why do we say the cat is both alive and dead?

The experiment says the following:

A cat is captured in a box together with a glass of poison which you cannot know when the poison will be released. The release of the poison is dependent on quantum mechanics progresses and so it is total coincidence and nobody is able to calculate when it will be released and kills the cat.

The cat can be seen as both, dead and alive because nobody ever can know if it is still alive or already killed by the poison until you open the box and look for the cat. This opening of the box is like a measurement in a quantum experiment.

However, the best explanation of Schrodinger's cat is, of course, Dr. Sheldon Coopers in The Big Bang Theory ;)

According to recent quantic theories, our universe wouldn't be unique and would have an infinite number of parallel copies. Describe your clone's life in one of those universe.

The life of my clone could be very different, because there are an infinite number of possibilities and infinite is a really really high number. Trust me, I am a mathematician, I know high numbers. However I will focus on one of these clones, let's call him R2Danny2.

So R2Danny2 wakes up every day at 42 o'clock (he lives on a planet with a day's duration of 192 hours because the rotation of this planet is much slower and people there can sleep up to 70 hours per day!) gets ready, dresses up (the international outfit is nothing but a smile) and eats his daily portion of food topped with cheesere (a food similar to our cheese with the same taste but all essential nutrients a human body needs and no unhealthy parts).

Afterwards he goes to university, takes a pill to increase his concentration and learning skills and five minutes later he knows all essential things about today's lecture.

In his free time he likes flying around the city (the planet's gravitation is lower than ours on earth and the atmosphere is much thicker, so you are able to fly if you jump and forget to hit the ground) reading five or six books at once with his flexible second head with eight extra eyes and four brains.

In a few years, R2Danny2 is also 21, he will graduate as Master of the universe and will know everything about this and every other universe (so also about us). Afterwards he wants to take a course at Defence against the Dark Arts and save Snape's life (in this universe Harry Potter is not a fictional book series but the biography of J.K. Rowling which will take place in the next 10 years).

So you see R2Danny2's life is nearly the same and the differences are difficult to notice.

If you want to know more interesting facts about his life and planet you have to invite me to your course ;)

PS: There are same really awesome animals, called Pokémon and invaders from the north, called White Walkers, which he has to defeat in order to become Captain of the Avengers. But for more details just ask me in Bruxelles!

Everyone knows the answer to life, universe, everything is 42. Give a mathemical demonstration of it (first order approximations accepted).

First of all, I have to note that this is a reference to Douglas Adams' science fiction series The Hitchhiker's Guide to the Galaxy and it is a funny coincidence because I'm currently reading the last of the five books and I totally love it!

To the question, here's my explanation:

My date of birth is 09/14/1995.

Let's subtract the square of 9 (=81) from 14^2 (=196) so you get 115

Now we subtract 95 and get 20. This number is very little and fearful, so we have to add it some friends. We add 19 and get 39.

We all know all good things go by three, so we have to add 3 a voila 42. Just a combination of my date of birth. I have to be the chosen one!

So my final message is:

We apologise for the inconvenience.