Berta Martínez Pàmias C/ Sanfeliu 11 baixos, L'Hospitalet de Llobregat, Spain +34 636 100 875

bertamp98@gmail.com

Dear Master's Degree Committee,

My name is Berta Martínez and I am writing to express my interest in studying the Master's Degree in Quantum Science and Technology.

I have recently finished my Bachelor's Degree in Physics, and I am very interested in the field of quantum physics. I can tell that the subjects that have fascinated and captivated me the most are, by far, the ones related to this field of study. As a result, during my degree, I have attended as many quantum related subjects as I could, such as Quantum Physics, Quantum Mechanics, Many-Body Quantum Mechanics or Quantum Information Theory.

In the last course mentioned previously, I learned about quantum computing, which I found it to be enthralling and riveting as it offers solutions to problems that would be almost impossible to solve classically. All these new possibilities and the new issues that it presents (such as in cryptography), sparked my interest in it. That is the reason why I decided to focus my degree final project on quantum computing, where I worked with the IBM's open-access real quantum computers to simulate the tunnelling of a quantum particle in a double-well potential. I really enjoyed and learned from this project and it made me determined to continue my studies in the quantum physics field, since I would like to learn more about quantum computing.

For all the aforementioned, when I found out that next year there was going to be a new master on quantum science, I knew I had to apply for it. I believe this master is an excellent opportunity to complement my previous education and go further into the topic of quantum physics. Furthermore, as far as I am concerned, quantum technology will play a big role in the future, and the progress in its investigation is becoming more and more relevant every day, so I would like my professional career to be a part of it. I hope the master will also help me decide whether to pursue an academic career or an industry-related career.

I think this master's degree will be a wonderful occasion to get to know more about this world and the scientists and companies that work on it, and to broaden the knowledge I have already acquired during my Physics degree. To sum up, I would be delighted to be a part of it.

Thank you for your consideration. I look forward to your response.

Yours sincerely,

Berta Martínez