

Sander Stambach
Rainweg 11
4450 Sissach
Schweiz
Tel: +41 79 589 32 69
E-Mail: sander.stambach@outlook.com

ETH Zürich
Campus Zentrum
Rämistrasse 101
8092 Zürich
Schweiz

Sissach CH, 27. 12. 2023

Dear Professor Dr. Chu,

I am Sander Stambach, and I discovered the open position on your website. I successfully completed my master's examination under the guidance of Dr. James Wooten at IMB Zurich, specializing in the field of quantum computing. Additionally, I conducted my Master's thesis under the supervision of Professor Potts, delving into theoretical quantum thermodynamics.

This piqued my interest instantly, as it is the perfect opportunity to further my studies in the field of hybrid quantum systems after the completion of my master's degree. My objective has always been to become a physicist, which is why I did my bachelor's degree in physics at the University of Basel. Throughout my studies, I learned to code in Python, Fortran, Java, and other programming languages. During my master's studies, I focused on theoretical quantum physics, as I am especially interested in this field. In addition, I attended lectures about high-energy particle physics as well as on quantum field theory. Moreover, I worked in group of Professor Potts on theoretical quantum thermodynamics.

Finally, my master's thesis consisted of researching numerical simulations, where I focused on full counting statistics.

Now that I have completed my master's degree, I would like to further my studies in a PhD position. The fascinating phenomenon of entanglement between spin and photons has captured and optomechanics my interest for quite some time. Despite my focus on a theoretical Master's degree in Quantum Thermodynamics, I am confident that I can make a significant contribution to your experimental group, Hybrid Quantum Systems. My conviction is grounded not only in my academic background but also in my in-depth exploration of related topics. I have attended various seminars on Nanotechnology, which have deepened and broadened my knowledge in this field. As a PhD student, I would love to be part of the research development and to make significant contributions to your work on quantum computing using my expertise in numerical and analytical skills in quantum physics.

I am a strongly resilient researcher with a high-stress tolerance. After my studies, I participated in various humanitarian aid trips to the Ukrainian warzone. This experience taught me how to keep calm in stressful situations and how to look for the best solution while considering all circumstances.

I would like to thank you in advance for your consideration, and I look forward to meeting you in person to discuss the possibility of my appointment.

Yours sincerely,

Sander Stambach