

Full-length Student Experience Highlight

Student: Lindsay Spoor; Track: Research in Physics and Classical/Quantum Information

What master specialization did you choose and why?

“I chose the classical/quantum information specialization. During my bachelor's in physics, I discovered a passion for programming-intensive courses, steering my interest toward a fusion of computer science and physics. In particular, this specialization aligns with my fascination for quantum computing, offering an opportunity to delve deeper into the field for my master's thesis. Furthermore, the programme's structure, involving two research projects—one potentially an internship — enticed me. Eager to explore research in both academic and corporate settings, this aspect was something I really valued when choosing this specialization.”

“My favorite course so far has been Reinforcement Learning. Despite the course not being directly tied to physics, it provided valuable insights into designing artificial intelligence frameworks for problem-solving as games. The hands-on programming assignments were valuable to me as it deepened my understanding of the field. Because of this course I centered my master's thesis around this field as well, creating a reinforcement learning framework to address quantum computing challenges.”

Why did you choose to do this master in Leiden?

“Leiden provided a rare balance by allowing flexibility in course selection beyond the specialization's core subjects. This autonomy appealed to me, enabling the inclusion of diverse interests like business courses within the master's curriculum. Furthermore, this particular specialization was unique to Leiden and resonated the most with my interests. Besides those practicalities, Leiden has a very humble and open atmosphere in which both professors and other students are willing to help each other.”

“I was pleasantly surprised by the deep involvement in research-related events during my research project. Additionally, the flexibility of the programme allowed me to tailor my curriculum to align perfectly with my personal preferences.”

What opportunities for research or professional experiences did you get during your master's?

“My major research project is within the applied quantum algorithms group (aQa), which encouraged me to engage in conferences, talks, seminars, and journal clubs. This involvement has provided me with a comprehensive understanding of the overarching research field, contributing to my professional development and future orientation. Additionally, I have the opportunity to undertake an internship at a company during my master's, allowing me to gain practical experience and explore potential career paths.”

What would you like to do after you have graduated from this specialization?

“During my student time, I've realized that my passion lies in applying the skills acquired during the physics programme to make a tangible societal impact rather than pursuing an academic career. The collaborative nature of my master's courses, where team assignments were prevalent, strengthened my appreciation for collective efforts in achieving goals. Overall, my post-graduation goal is to leverage my practical knowledge and skills to contribute meaningfully to projects with real-world significance.”

Any general advice on choosing a master's specialization in physics?

“One of the main things that helped me make my decision was asking a lot of questions to other students, reading some papers about the field of research you might be interested in, and, most importantly, weighing for yourself what you value most about your future career and in your life in general. Even when choosing a master's specialization, this does not yet have to mean you completely have to know already what you want to achieve during your research or what career path you want to take afterwards.”

“One thing I learned during my master's about making decisions for the future, is that any path you decide to walk gains you more insight about your interests and values for the future.”