

Tientso Ning

## Seminar Report

### LISE MEITNER

Lise Meitner was a Swedish-Austrian physicist, known for her work and contributions to the field regarding radioactivity, and nuclear physics. It is notable to mention that her education of math and science started from a young age, with her interests being supported by her parents despite societal restrictions on women in the field of science and mathematics. She attended private institutions to study physics, and was the second woman to get a doctoral degree in physics from the University of Vienna.

In terms of her area of research, Meitner started as an assistant to well-known physicist Planck (from the planck constant!) Her work during this period of time along with her colleagues led to discovery of new isotopes, advances in knowledge on beta radiation, and methods such as radioactive recoil. She earned much recognition for her work in particle physics, as well as her work in nuclear fission.

It is important to note Meitner's struggles in the field due to societal discrimination against her gender. For example, she was not paid upon joining the Kaiser-Wilhelm Institute radiology department, despite her already advanced contributions in the field, and it was only much later that she received a permanent position. Additionally, Meitner also had to perform at a much higher level to obtain opportunities inside academia, notably, being the first woman that Planck accepted to attend lectures. Women in the field of STEM face this discrimination still, and these stories/experiences that Meitner experienced are not unique to just her. Even today, on average, women are discredited/treated less professionally, and are not granted the same opportunities as male peers. One of the most important factors however, is both the lack of representation in the field in tandem with lack of support for young women into the field of STEM (seen especially in Computer Science). It bodes well for the future that programs such as "Women Who Code" provide well-needed foundations to try and combat this type of structural discrimination.