

## **The Gendered Culture of Physics: The Case of the Institute for Radium Research in Vienna**

I focus on gender as an analytical category of particular importance for the history of 20<sup>th</sup>-century physics. In particular, I investigate the interrelation of women physicists and the material culture of physics in the Institute for Radium Research in Vienna between 1920 and 1938. I am concerned with instruments and laboratory devices as well as experimental techniques and tasks. In other words, I focus on the experimental technology of radiation physics.

### **Main hypothesis:**

Women physicists transformed the culture of physics in certain ways and in several dimensions. Three proposals:

- a. The points of entry for women into physics during the first half of the 20<sup>th</sup> century were influenced by the material culture of the discipline.
- b. At the same time, machines themselves were often shaped by their female designers and users so as to fit in with women's complicated professional lives.
- c. Gender greatly influenced the ways in which researchers crossed disciplinary boundaries, dispersing and transferring knowledge from one to another.

### **Overall point**

*I want to subvert the stereotype of the "patient women". The role of women in radioactivity was not merely as technicians. They did not just calculate, use the scintillation counters or prepare the experimental settings for their male colleagues. I wish to argue that women physicists played a central role in the formation of the discipline. Most of all they were capable experimental physicists.*

**Physics as a sticking point:** the focus on experimental technology

**The use of the concept of gender:** gender as an analytical category within a specific cultural and historical setting