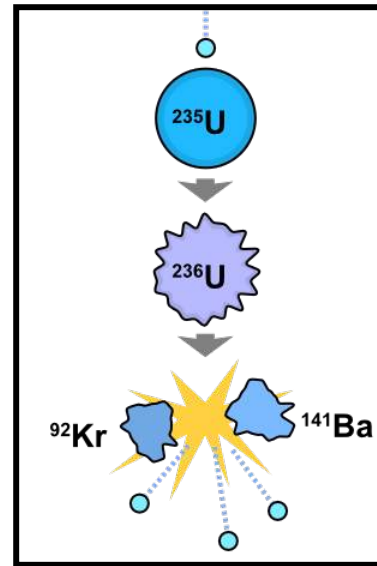




LISE MEITNER. Physicist. Austria(1878-1968)

She made the calculations leading to the discovery of **nuclear fission**. It was only her collaborator, who never mentioned her in his report to the Academy, who received the Nobel Prize for the discovery.

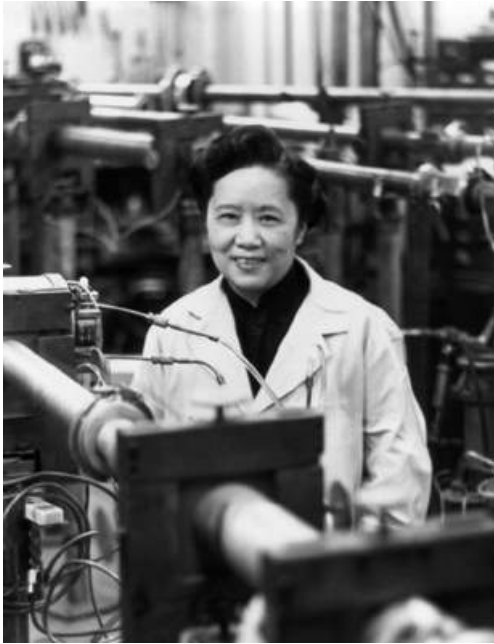
**Nuclear fission** happens when the nucleus of an atom splits into two or more smaller nuclei. The process releases a great amount of energy, but it is very difficult to control and the resulting products are highly radioactive.



*Nuclear fission of Uranium 235 provoking Krypton, Bario, 3 neutrons and ENERGY.*



## LISE MEITNER. Nuclear fission



CHIEN-SHIUNG WU. Physicist. USA (1912-1997)

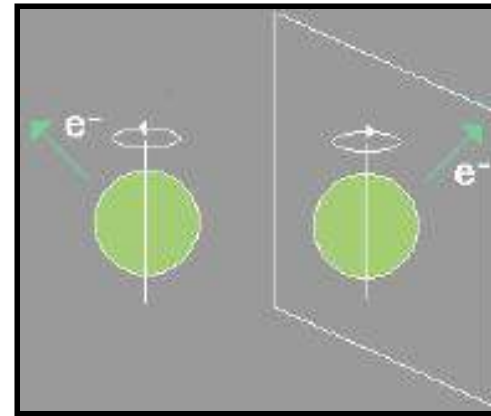
In 1957, Chien-Shiung Wu **proved experimentally that nature discerns between right and left** (no conservation of parity).

In spite of the fact she was the one to prove it, only the scientists who put forward the theory were awarded the Nobel Prize in 1957.

### The experiment of Wu.

The radioactive atom of cobalt 60 emits an electron, the emission could be in the direction that the nucleus turns or in the opposite direction.

Wu proved the priority of the emission of the electron in the opposite direction to the turning and that both possibilities did not happen at 50% as it was believed up to then.



*Conservation of parity*



# CHIEN-SHIUNG WU. No conservation of parity



EMMY NOETHER  
Mathematician, Germany 1882-1935



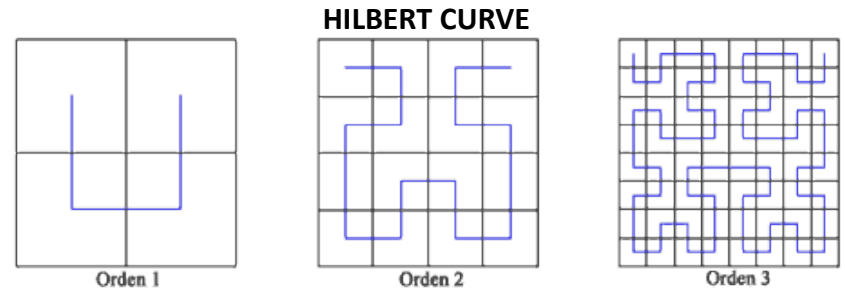
DAVID HILBERT  
Mathematician, Germany 1862 -1943

"I do not see that the gender of the candidate is an argument against her admission as a private lecturer. After all, we are a university, not a bath house!"

**David Hilbert**

*In defense of Emmy Noether's incorporation into the faculty of the University of Göttingen, 1915.*

Order 1: divide a square into 4 pieces, and join their centers.  
Order 2: divide each square into 4 parts and join their centers.  
Order 3: repeat the procedure a third time.  
If we repeat this procedure infinitely, there is a curve that "fills" the entire space in the limit we obtain:



# HILBERT CURVE



