

# *Leó Szilárd*



February 11, 1898 - May 30, 1964

## *Early life*

- He was born before the World War I.
- From 1908-1916 he attended primary school in his home town
- After the school he joined at Budapest Technical University and he became an engineering student
- In 1919 decided to leave Hungary, because he didn't learn at university about the Jewish law.(numerus clausus)

# Early life

- In Berlin, Szilárd continued engineering studies at Technische Hochschule (Technical University in Berlin), and he soon changed to physics there and took physics classes from Einstein, Planck, and Max von Laue
- In 1922 he dissertation on thermodynamics.

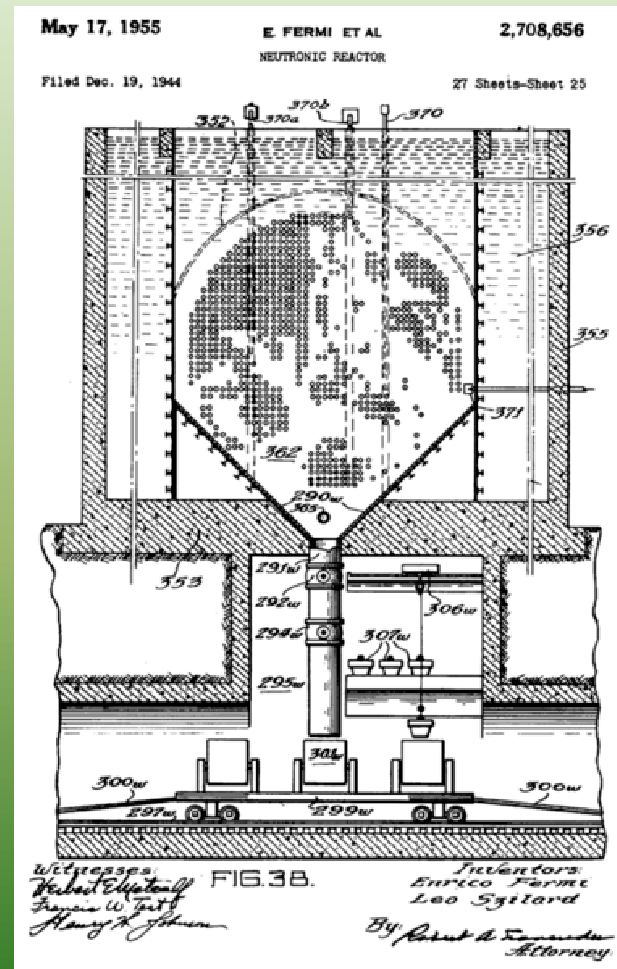


↑  
*/Einstein works with Szilárd /*

## *His jobs, developing and nuclear chain reaction*

- In 1938 Szilárd accepted an offer to conduct research at Columbia University in Manhattan, and moved to New York, and was soon joined by Fermi
- After learning about nuclear fission in 1939, they concluded that uranium would be the element capable of sustaining a chain reaction. Szilárd and Fermi conducted a simple experiment at Columbia and discovered significant neutron multiplication in uranium, proving that the chain reaction was possible and opening the way to nuclear weapons.

# Nuclear Chain Reaction



/An image from the Fermi-Szilárd "neutronic reactor" patent /

Szilárd later described the event: "We turned the switch, saw the flashes, watched for ten minutes, then switched everything off and went home. That night I knew the world was headed for sorrow".

# *Nuclear Weapons*

- In 1932, Szilárd had read about the fictional "atomic bombs" described in novel.
- This inspired him to be the first scientist to creation of nuclear weapons
- He was the first person to conceive of a device that, using a nuclear chain reaction as fuel, could be used as a bomb.

# *After the war*

- Szilárd married Gertrud Weiss in 1951.
- In 1961 Szilárd published a book of short stories, *The Voice of the Dolphins*
- They spent last years Salk Institute in San Diego
- In 1960, Szilárd was diagnosed with bladder cancer
- In May 1964, Szilárd died in his sleep of a heart attack.

