Neutron Stars

A Nobel Prize scandal

Alfred Nobel (1833 – 1896)



Alfred Nobel

A Swedish chemist, engineer and inventor Owned Bofors: an iron and steel producer; a major manufacturer of cannon and other armaments

Alfred Nobel

Held 355 different Patents His most famous invention being dynamite Explosion of 3 September 1864 killed his younger brother

Alfred Nobel

He gained proficiency in six languages: Swedish, French, Russian, English, German and Italian

1887 Alfred read his own obituary!

"Dr. Alfred Nobel, who became rich by finding ways to kill more people faster than ever before, died yesterday"

1895, at the Swedish-Norwegian Club in Paris, Nobel signed his last will and testament and set aside the bulk of his estate to establish the Nobel Prizes, to be awarded annually without distinction of nationality. \$US 250 million

Nobel Prizes

- Literature
- Physics
- Chemistry
- Peace
- Economics
- Physiology & Medicine

Nobel laid down strict rules:

No more than three people should share a prize

Prize winners, Laureates, should be living at the time of the award

Nobel Prizes

- -Literature
- -Physics
- -Chemistry
- -Peace
- -Economics
- –Physiology & Medicine
 –What about Mathematics?

Mullard Radio Telescope Cambridge July 1967

Dame Dr. Susan Jocelyn Bell Burnell DBE, FRS, FRAS

Jocelyn Bell





One pulse per second

Sidereal time (23hr 56min)

"Little Green Man 1" (LGM-1)

A Pulsar

A Rotating Neutron Star



Nobel Prize for Physics 1974

Antony Hewish

Martin Ryle

Nobel Prize for Physics 1974

Citation:

"for their pioneering research in radio astrophysics: Ryle for his observations and inventions, in particular of the aperture synthesis technique, and Hewish for his decisive role in the discovery of pulsars"

The proverbial hit the fan Many scientists expressed shock Fred Hoyle led the charge Accused Hewish of theft Hewish prepared to sue

The English law of libel

Truth is no defence

Post Script In 2019, Jocelyn Bell Burnell was awarded

The Breakthrough Prize

Dame Dr. Susan Jocelyn Bell Burnell DBE, FRS, FRAS



The Breakthrough Prize

Worth 3 million US dollars
She donated all of it to the Institue of Physics to

 "open doors to physics for people from every walk of life"

The End

The Real End