Francis Aston

Francis William Aston 1877–1945
Awarded the Nobel Prize in Chemistry in 1922

- British chemist and physicist
- Birmingham alumnus and University lecturer
- Obtained two degrees from Birmingham: a BSc in Applied/Pure Science (1910) and a DSc in Applied/Pure Science (1914)

Known for his work on isotopes and the whole-number rule, Francis Aston –

- Invented the mass spectroscope to separate isotopes of neon by taking advantage of their slight differences in mass
- Repeated the experiments with other elements and was able to show that, when expressed as atomic weight units, their masses could be expressed in whole numbers. The whole number principle was of vital importance in the eventual derivation of the structure of the atomic nucleus

During a scholarship at Birmingham he discovered the phenomenon in discharge tubes known as the Aston Dark Space.

In 1921 he was made a Fellow of the Royal Society and was awarded the Society's Hughes Medal in the same year that he received the Nobel Prize.

Francis Aston received many awards for his work including the Royal Medal, the John Scott and the Paterno medals and was the author of *Isotopes and Structural Units of the Material Universe*.