

1. Eoin Gill presentation on Boyle, Callan and Tyndall

Eoin began with reference to the fact that women didn't feature much in any of the professions, including the sciences, until relatively recent times. He said that Robert Boyle had a great deal of money and spent much of it on science. Boyle, Galileo and others were part of a movement whereby science transitioned from Aristotelian thinking (earth, air, fire, water) to a modern view. Boyle developed a better vacuum pump (in collaboration with Robert Hooke) and used it in a range of experiments. He is especially remembered for Boyle's law which he formulated based on tables of measurements of pressure and volume, rather than on graphs. He was aware of similar work by Power and Townley. Robert Boyle was a great proponent of experimental philosophy. He was a founding fellow of the Royal Society and a leading scientist of his day. He is regarded as the father of Chemistry.

Eoin then told us that Nicholas Callan was born in 1799 in Co. Louth and became Professor of Natural Philosophy in Maynooth. His Physics interests were in the area of electricity and magnetism. In 1836 he invented the induction coil which is still in widespread use today. In 1848 he built the largest battery in the world at that time (over 1000 Volts). He patented the Maynooth battery which used the casing as anode. In 1843 he lifted in excess of 2000kg using an electromagnet (a world record). Callan was a great proponent of demonstrations in teaching physics.

Eoin then described John Tyndall as a leading figure of Victorian Science. He was a great experimenter and a great communicator. He was famous for his demonstration lectures at the Royal Institution in London. Eoin showed a sketch of one of Tyndall's very elaborate experimental arrangements whereby he demonstrated the mechanism by which the greenhouse effect proceeds. Tyndall was born in Leighlinbridge, Co. Carlow in 1820. For further info, email eoin.gill@setu

2. A selection of other Physicists with Irish connections

The Hub-98 presentation gives a snapshot of other contributors to Ireland's Physics Heritage: William Molyneux, Edith Stoney, Ernest Walton. Thomas Romney Robinson, Jocelyn Bell Burnell, George Gabriel Stokes, John Stewart Bell, William Thompson (Lord Kelvin), Dionysius Lardner, Sheila Tinney, William Rowan Hamilton, George Francis Fitzgerald, Brother Potamian, William Parsons (3rd Earl of Rosse), John Holland, Kathleen Lonsdale.

Weblinks:

Paul Nugent's presentation on "Some of Ireland's greatest Physicists available at:
[Some of Irelands Greatest Physicist.pdf - Google Drive](#)

Physics 300 at Trinity College Dublin <https://www.tcd.ie/physics/300/>

Jocelyn Bell Burnell telling her story of Pulsars at <https://www.youtube.com/watch?v=-335gUOvdhA>

Robert Boyle Summer School at <https://www.robertboyle.ie/robert-boyle-summer-school/>