

Girton Walking Group – Science Walk on 4th August 2018

The Girton walking group had a real treat this month – we were led round local sites with connections to the wealth of scientific history that Cambridge possesses. On a warm and sunny morning, John Cook, a local resident who works in the Schlumberger building on the West Cambridge site, gave us an engaging and informative tour.

We were told about the scientists commemorated on the Eddington site. Alan Turing is well-known as the celebrated codebreaker of Bletchley Park, but was also a hugely influential scientist and mathematician, laying the foundations of today's information- and computer-based society. Arthur Eddington himself was an astrophysicist who wrote extensively about the theory of relativity, explaining it to the English-speaking world at a time when, because of the First World War, work with Einstein had ceased. Because Eddington was a Quaker and a pacifist, he was prepared to work with Einstein.

We crossed the Madingley road to the West Cambridge site, the science base for Cambridge University, and first admired (?) the Schlumberger building itself. It is now Grade 2* listed by English Heritage, and is a very distinctive marquee-like structure

Philippa Fawcett (pronounced so oddly by the announcer on the U bus as it passes the road named after her), was a mathematician at Newnham College. In 1890 she became the first woman to obtain the top score in the Cambridge Mathematical Tripos exams. The results were highly publicised, with the top scorers receiving great acclaim. Her score was 13 per cent higher than the second highest, but she did not receive the title of senior wrangler, as only men were then ranked and women were listed separately. When the women's list was announced Fawcett was described as "above the senior wrangler".

Also on that site is the Cavendish laboratory ('Cav 2' to the initiated. 'Cav 1' was on the New Museums Site. A new one – 'Cav 3'? – will be built on the West Cambridge site soon). So far, 29 Cavendish researchers are Nobel Laureates. Henry Cavendish was at Peterhouse 1748–1753, and became the largest shareholder in the Bank of England. He was also highly eccentric, refusing to talk to women, or to anyone he hadn't met before. The Cavendish Laboratory was endowed by one of his later relatives, William Cavendish, 7th Duke of Devonshire (Chancellor of the University from 1861 to 1891). Henry Cavendish discovered hydrogen and developed the first formula for measuring the earth's density.

JJ Thomson Avenue is named after Joseph John Thomson, 1856–1940, a Trinity fellow who won a Nobel prize for the discovery of the electron. Interestingly, his son George Paget Thomson (commemorated with a building at Corpus Christi's Leckhampton site on Grange Road) later won it for disproving his father's theory that an electron was a particle, like a ball bearing; George proved that it was also a wave.

We also visited the Mathematics site and the Institute of Astronomy, with its interesting observatories. These are open to the public on Wednesday evenings in the autumn and winter months. On this site Jocelyn Bell Burnell (New Hall 1965–1968) discovered pulsars, using a homemade radio telescope at Mullard observatory. The discovery was recognised by the award of the Nobel Prize in Physics to her thesis supervisor Antony Hewish and to the astronomer Martin Ryle. Bell was excluded, despite having been the first to observe and precisely analyse the pulsars. We stopped to pose for a picture with a statue of Fred Hoyle, the writer of science fiction, and also a British astronomer who held controversial stances on many scientific matters – in particular his rejection of the 'Big Bang' theory, a term coined by him on BBC radio, and his promotion of panspermia (a theory that bodies such as comets transported life forms such as bacteria – complete with their DNA – through space to the Earth, as the origin of life on Earth). His statue is on the astronomy site.



On Grange Road we discovered the house of Frederick Gowland Hopkins , who won the Nobel prize for discovering the role of vitamins. It was now midday, and getting hot; so, we agreed to stop there and continue the science walk in December. This will be mostly in the city centre. Our thanks go to John for all his research and hard work in putting this walk together.

Gina Lane