**Paul Langevin’s science and his links with England**

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The French physicist Paul Langevin (1872-1946) made important contributions to theoretical physics in such diverse areas as ion transport, molecular kinetics, magnetism, relativity and neutron collisions. He gave his name the Langevin Equation for stochastic dynamics and the Langevin theory of diamagnetism. He demonstrated his ability in applied physics as the founder of modern ultrasonics. This talk will place Langevin’s scientific work in the context of his strong links with England and British scientists, starting with his formative year in J.J. Thomson’s Cavendish Laboratory in 1897 where he first met Ernest Rutherford. In 1910, the English physicist John Sealy Townsend was the first to nominate Langevin for a Nobel Prize, although unsuccessfully. During WWI he led the naval ultrasonics laboratories in both Toulon and Harwich, enabling the success of British Asdics, the precursor of Sonar. He was awarded the Hughes Medal in 1915 by the Royal Society of London, becoming a Foreign Member in 1928. The Physical Society awarded him the Guthrie Medal in 1917: he was given honorary doctorates by the Universities of Bristol, Manchester, Leeds and Cambridge. Between the wars, his chairmanship of three Solvay Congresses cemented links with other British scientists, including the Braggs. His political activities, publically anti-fascist, promoting social justice and the importance of science in education, gained the admiration and respect of J.D. Bernal. 2022, the 150th anniversary of Langevin’s birth, gave the opportunity to recognise the international stature of this principled man of science and of the people.

Francis Duck PhD MBE is a retired medical physicist, living in Bath. His career in medical ultrasonics led to an interest in Paul Langevin, and to an awareness of the paucity of published material in the English language about his life and work. In consequence, he facilitated the publication of an English translation of Joliot-Curie’s Royal Society biography, and of André Langevin’s biography *Paul Langevin mon pére*, by EDP Sciences. During Langevin’s 150th anniversary year, 2022, he lectured and published extensively about Langevin’s life and work.