

OLLI V. LOUNASMAA MEMORIAL PRIZE 2020



The Olli V. Lounasmaa Memorial Prize 2020 was awarded to Professor J. C. Séamus Davis (University of Oxford, UK, with Honorary Doctorate at University College Cork, Ireland, and Emeritus Professor at Cornell University, NY, USA) for his pioneering investigations and applications of exquisite scanning probe techniques for visualization of electronic quantum matter at the atomic scale. The prize is announced on September 4th 2020 at the international condensed matter physics conference CMD2020GEFES, organized online.

Prof. Davis was elected for the Prize by a Selection Committee consisting of Dr. Eddy Collin (Institut NEEL, CNRS, France), Professors Michel Devoret (Yale University, US), Milena Grifoni (University of Regensburg, Germany), Pertti Hakonen (chair, Aalto University), Rich Haley (Lancaster University, UK), Koji Ishibashi (RIKEN, Japan), Valery Ryazanov (Institute of Solid State Physics RAS, Russia), Dr. Anssi Salmela (Bluefors), and Professor Mika Sillanpää (Aalto University).

J. C. Séamus Davis graduated from University College Cork, National University of Ireland, in 1983, and received his PhD from University of California, Berkeley in 1989. He has pioneered the development and applications of electronic matter visualization techniques in the low temperature regime. Today, the instruments emulating his design have spawned a worldwide revolution in electronic quantum matter studies, allowing direct visualization of electronic matter. His persistent scientific and technological work has generated numerous advances in the understanding of strongly correlated superconductivity, changing the direction of discourse in the field of low temperature physics.

Prof. Davis is a Fellow of the Institute of Physics (UK), the American Physical Society (USA), the Max Planck Gesellschaft (DE), the Royal Irish Academy (IE), and a Member of the US National Academy of Sciences. He is the recipient of the Outstanding Performance Award of the Berkeley National Lab. (2000), the Science and Technology Award of Brookhaven National Lab. (2013), the Fritz London Memorial Prize (2005), the Kamerlingh-Onnes Memorial Prize (2009), and the Science Foundation Ireland Medal of Science (2016).

The Olli V. Lounasmaa Memorial Prize is awarded once every four years to scientists who have made outstanding contributions to advances in low temperature physics and related fields. The prize, which was first awarded in 2004, is a tribute to the founder of the strong Finnish research tradition in low temperature physics and its applications. The Prize Fund receives endowment from Bluefors, a 2008 spin-off company from the Low Temperature Laboratory of Aalto University (established by Lounasmaa in 1965).