

Manuel Calderón de la Barca Sánchez is a Professor of Physics at the Department of Physics and Astronomy at the University of California, Davis. His research involves the experimental studies of ultra-relativistic heavy ion collisions at the Large Hadron Collider with the Compact Muon Solenoid (CMS) experiment. His work on the study of particles composed of heavy quark-antiquark pairs, such as bottom-antibottom and charm-anticharm quarks, aims to shed light on the properties of the Quark-Gluon Plasma. This state of matter permeated the entire universe when it was only a millionth of a second old and can be studied at the collider facilities that smash nuclei at the highest energies, such as the Large Hadron Collider at CERN. He has received the NSF CAREER Award (2006), the UC Davis Citation for Distinguished Teaching (2013), the UC Davis Faculty Citation Award for Diversity and Principles of Community. He is the featured scientist and narrator of the IMAX/Giant Screen film, “Secrets of the Universe”, which explores how scientists study the Quark-Gluon Plasma, placing its study in the context of the history of science and inviting general audiences, and particularly children, to marvel at our Universe.