

Professor Robert Calderbank



Dr. Robert Calderbank is a Professor of Electrical Engineering and Mathematics at Princeton University where he directs the Program in Applied and Computational Mathematics. He joined Princeton from AT&T where he was Vice President for Research and responsible for designing the first Research Lab in the world where the primary focus is data. Inventions by Dr. Calderbank in his career at Bell Labs and AT&T have transformed communications practice in voiceband modems, advanced read channels for magnetic recording, and wireless systems. He also created the framework for fault tolerant quantum computation together with Peter Shor.

Dr. Calderbank was honored by the IEEE Information Theory Prize Paper Award in 1995 for his work on the Z₄ linearity of Kerdock and Preparata Codes (joint with A.R. Hammons Jr., P.V. Kumar, N.J.A. Sloane, and P. Sole), and again in 1999 for the invention of space-time codes (joint with V.Tarokh and N. Seshadri). He became an AT&T Fellow in 2000, received the IEEE Millennium Medal in 2000 and was elected to the National Academy of Engineering in 2005.