

A Brief Biography Brian Marcus

Brian Marcus was born and educated in California: attended Claremont Mens College, BA from Pomona College in 1971 and PhD from UC Berkeley in 1975, both in Mathematics. He held a Thomas Watson Postdoctoral Fellowship at the IBM Watson Research Center in 1976-1977. His first regular academic job was with the University of North Carolina at Chapel Hill (Assistant Professor: 1975-1980, and Associate Professor (with Tenure): 1980-1985). He was a Research Staff Member at the IBM Almaden Research Center from 1984 to 2002. Since 2002, he has been Professor of Mathematics at the University of British Columbia, serving as Department Head from 2002 to 2007.

While at IBM, he held several adjunct and visiting positions at universities, including UC Berkeley (Visiting Associate Professor, 1986), UC Santa Cruz (Visiting Lecturer, 1985; Adjunct Associate Professor, 1987) and Stanford University (Visiting Lecturer, 1985, 1993; Consulting Associate Professor, 2000-2003). He has served as the principal PhD dissertation supervisor for students at UNC Chapel Hill, UC Santa Cruz, Stanford and UBC.

He started research in ergodic theory and dynamical systems and then made a natural transition to coding and information theory. He has worked extensively on the theory and practice of coding for disk drives and is particularly interested in symbolic dynamics and its applications. His publications include over sixty research papers in refereed mathematics and engineering journals, as well as several expository publications including *An Introduction to Symbolic Dynamics and Coding*, with D. Lind (Cambridge University Press, 1995; reprinted 1999). He also holds twelve US patents.

He has been active on several editorial boards, society committees and conference committees for AMS, CMS, IEEE, IMA, and MSRI, most recently serving as elected member of the AMS Council (2003-2006) and co-director of the 2010 CMS National Winter Meeting. He has received substantial research funding from NSF and NSERC.

Finally, some awards and honours: IBM Outstanding Innovation Award (with R. Karabed, 1988); Leonard G. Abraham Prize Paper Award of the IEEE Communications Society (with P. Siegel and J. Wolf, 1993); invited Plenary lecture at the IEEE International Symposium on Information Theory (1995), elected IEEE Fellow (1999), and the IBM Award for Best Paper in Communications (with R. Cidecyian, E. Eleftheriou and D. Modha, 2002).