

10 Things You Did Not Know About Memristors

Leon O. Chua[†]

†Electrical Engineering and Computer Sciences Department, University of California, Berkeley 253 Cory Hall # 1770, Berkeley, CA 94720-1770, USA Email: chua@eecs.berkeley.edu

Abstract—This lecture presents 10 new results relevant to an in-depth understanding of the properties and potential applications of memristors.

About Professor Leon O. Chua

Prof. Chua received his MS and PhD degrees from Massachusetts Institute of Technology and the University of Illinois at Urbana-Champaign. Since 1970, he has been with the University of California, Berkeley, where he is currently a Professor of Electrical Engineering and Computer Sciences. He was the first recipient of the IEEE Gustav Robert Kirchhoff Award in 2005 and was awarded the IEEE Neural Networks Pioneer Award in 2000. Elected an IEEE Fellow in 1974, he has received many international prizes, including the IEEE Browder J. Thompson Memorial Prize, the IEEE W.R.G. Baker Prize, the Frederick Emmons Award, the M.E. Van Valkenburg Award (twice), and the 2005 Francqui Award from Belgium. He has been awarded seven USA patents and 17 Honorary doctorates from universities in Europe, Japan and Hong Kong. He was elected a foreign member of the European Academy of Sciences and the Hungarian Academy of Sciences. In 2010, he was awarded a John Guggenheim Fellow and The Leverhulme Trust Visiting Professorship. In 2011 he was awarded a Distinguished Professorship by Techniche Universitt Mnchen, Germany, and also a Royal Academy of Engineering Distinguished Visiting Fellowship within Imperial College London. In 2013-2015 he was awarded the Marie Curie Fellowship by the European Commission.