

综合报告会

Lecture

国家数学与交叉科学中心

时间：2011年10月25日 上午10:00-11:30

地点：中科院数学院晨兴中心110报告厅

Memristors: Past, Present and Future



Speaker: Prof. Leon Chua

University of California at Berkeley, USA

Abstract:

The 2008 Hewlett-Packard publication of the memristor in NATURE has produced immense worldwide interests from both industry and academia. This seminar presents a prehistory of the memristor and provides answers to the following Frequently Asked Questions : What is a memristor? Why is it called the 4th circuit element? Why did it take 37 years to make a memristor? Why did the Hewlett-Packard memristor generate so much excitement? How does the memristor retain its memory even after the power is switched off? What is the difference between a non-volatile memristor and a locally-active memristor? How smart are memristors? How does the memristor enable learning and intelligence ?

Brief CV :

Professor Leon O Chua received his MS and PhD degrees from the Massachusetts Institute of Technology and the University of Illinois at Champaign - Urbana. Since 1970, he has been at the University of California, Berkeley, where he is currently a Professor of Electronic 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 numerous 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 12 Honourary doctorates from universities in Europe and Japan. He was elected a foreign member of the European Academy of Sciences and the Hungarian Academy of Sciences.