EVENING KEYNOTE
Lynn Conway, Prof. Emerita of EECS, University of Michigan

Lynn Conway was born in Mount Vernon, N.Y., in 1938. After studying physics at M.I.T., and earning a B.S. and M.S.E.E. at Columbia University, she made foundational contributions to computer architecture at IBM Research and IBM ACS, including invention of multiple-out-of-order dynamic instruction scheduling. Even so, IBM fired Lynn in 1968 upon learning she was undergoing gender transition.

Starting all over again in a covert new identity, Lynn advanced rapidly to become a computer architect at Memorex and began decades living in fear of being outed.

Recruited by Xerox PARC in 1973, Lynn innovated scalable design rules and structured design methods for VLSI silicon chip design, and became principal author of the famous Mead-Conway text *Introduction to VLSI systems*.

While serving as a Visiting Associate Professor of EECS at M.I.T. in 1978, Lynn pioneered the teaching of the new design methods – thereby launching a worldwide revolution in microchip design in the 1980's. She also innovated an internet e-commerce system for rapid chip prototyping, spawning the MOSIS System and the modern "fabless-design" plus "silicon-foundry" paradigm of semiconductor system design and manufacturing.

As Assistant Director for Strategic Computing at DARPA, Lynn crafted the meta-architecture and led the planning of that major 1980's effort to expand the technology-base for modern intelligent-weapons systems. She joined the University of Michigan in 1985 as Professor of EECS and Associate Dean of Engineering, where she continued her distinguished career.

In 2012, the IEEE published Lynn's "VLSI Reminiscences" in a special issue of *Solid-State Circuits Magazine*. In it she revealed how – closeted and hidden behind the scenes – she conceived the ideas and orchestrated the events that changed an industry. Building on those experiences, she is now improvisationally exploring the meta-architecture of "exploration infrastructure" for enabling teams of visionary system architects, designers, engineers and makers to rapidly explore wild new techno-social-experiential frontiers.

A Fellow of the IEEE, Lynn has received the Wetherill Medal of the Franklin Institute, the Secretary of Defense Meritorious Achievement Award, the Pioneer Award of the IEEE Computer Society, the Fellow Award of the Computer History Museum, honorary doctorates from Trinity College and Illinois Institute of Technology and has been elected to the *Electronic Design* Hall of Fame and the National Academy of Engineering. She will receive the prestigious IEEE/RSE Wolfson "James Clerk Maxwell Award" this coming June.