# **COLLEGIATE PROFESSORS**

Collegiate professorships are essential to the University of Michigan College of Engineering. They provide resources to reward and retain outstanding faculty in all areas of engineering. Appointment to a collegiate professorship is reserved for a faculty member of national and often international stature who has earned a highly distinguished record of teaching, research and publication. These professorships are traditionally named for former faculty members who made substantial scholarly and other contributions while at Michigan. Collegiate professorships, which are funded by the College, bring prestige and recognition to leading members of the faculty and reward their contributions to the institution and to the field.

### COLLEGIATE PROFESSORSHIP RECOGNITION

MICHAEL P. WELLMAN

AS THE
LYNN A. CONWAY COLLEGIATE PROFESSOR OF
COMPUTER SCIENCE AND ENGINEERING



#### Regents of the University of Michigan

Michael J. Behm, Grand Blanc
Mark J. Bernstein, Ann Arbor
Laurence B. Deitch, Bloomfield Hills
Shauna Ryder Diggs, Grosse Pointe
Denise Ilitch, Bingham Farms
Andrea Fischer Newman, Ann Arbor
Andrew C. Richner, Grosse Pointe Park
Katherine E. White, Ann Arbor
Mark S. Schlissel, ex officio





Lynn A. Conway
Professor of EECS, Emerita

After earning her BS ('62) and MSEE ('63) at Columbia University's School of Engineering and Applied Science, Conway joined IBM Research, where she made foundational contributions to computer architecture. At Xerox Palo Alto Research Center in the 1970s, Conway invented scalable design rules for VLSI, became principal author of the seminal textbook Introduction to VLSI Systems, and while serving as a Visiting Assoc. Professor of EECS at MIT in 1978 pioneered the teaching of the new methods. Conway's teachings rapidly spread to over 100 universities, launching a worldwide revolution in microchip design during the 1980s.

Conway also invented and massively demonstrated an e-commerce system for rapid chip prototyping, spawning the MOSIS System and the "fabless-design + silicon-foundry" paradigm of chip design and manufacturing. As Assistant Director for Strategic Computing at DARPA, Conway crafted the meta-architecture and led the planning of the Strategic Computing Initiative, DOD's major 1980s effort to expand the technology base for modern intelligent weapons systems.

Conway joined the University of Michigan as Professor of EECS and Associate Dean of Engineering in 1985, continuing her distinguished career. A Fellow of the IEEE, a Member of the Computer History Museum Hall of Fellows, and a Member of the National Academy of Engineering, Conway has also received honorary degrees from Trinity College and Illinois Institute of Technology. Awarded the 2015 James Clerk Maxwell Medal by the IEEE and the Royal Society of Edinburgh, her citation included these words: "Her influence on modern electrical engineering is deep and profound, arguably on the scale of Armstrong and Steinmetz."

### PROGRAM MAY 5, 2016

#### **WELCOME:**

**Marios Papaefthymiou** 

Professor and Chair of Computer Science and Engineering
Department of Electrical Engineering and Computer Science

#### **INTRODUCTORY REMARKS:**

David C. Munson, Jr.

Robert J. Vlasic Dean of Engineering

#### **REMARKS:**

**Elaine Wah** 

Former Student

#### **LECTURE:**

Michael P. Wellman

### **AUTONOMOUS AGENTS:** THREAT OR MENACE?

## PRESENTATION OF CHAIR AND PROFESSORSHIP MEDAL

David C. Munson, Jr.

#### **REMARKS:**

Lynn A. Conway
Professor of EECS. Emerita

#### RECEPTION



Michael P. Wellman has enjoyed his place on the faculty of Computer Science & Engineering at the University of Michigan since joining as Assistant Professor in 1992. This followed four years of active duty service in the US Air Force and nine years of undergraduate and graduate study at the Massachusetts Institute of Technology. Wellman is proud advisor of 20 graduated PhDs, and teacher of a multitude of undergraduate and graduate students.

Wellman's research applies principles of computation and economics to engineer rational decision-making strategies and analyze complex systems of interacting agents. A broad theme of his work is the interplay of technology and incentives in shaping behavior. His early investigations in computational markets led him to pioneering work in Internet auctions, later commercialized through startup company TradingDynamics. Subsequent research developed techniques for design and analysis of trading agents, and an array of related topics in electronic commerce. Current work combines empirical methods and game-theoretic concepts for strategic reasoning about complex multiagent domains, with particular focus on modeling financial markets and the financial system.

Wellman has served the university and the research community in numerous leadership positions. He is a Fellow of the Association for the Advancement of Artificial Intelligence, as well as the Association for Computing Machinery. In 2014 he was recognized by ACM/SIGAI with the Autonomous Agents Research Award. At the University of Michigan, Wellman is recipient of the Faculty Recognition Award, and of awards from the EECS Department for Teaching Excellence and Outstanding Achievement.