Martin Hellman
Professor of Electrical Engineering, Emeritus

Bio

BIO
Martin E. Hellman is Professor Emeritus of Electrical Engineering at Stanford University and is affiliated with the university's Center for International Security and Cooperation (CISAC). His most recent work, "Rethinking National Security," identifies a number of questionable assumptions that are largely taken as axiomatic truths. A key part of that work brings a risk informed framework to a potential failure of nuclear deterrence and then finds surprising ways to reduce the risk. His earlier work included co-inventing public key cryptography, the technology that underlies the secure portion of the Internet. His many honors include election to the National Academy of Engineering and receiving (jointly with his colleague Whit Diffie) the million dollar ACM Turing Award, the top prize in computer science. In 2016, he and his wife of fifty years published "A New Map for Relationships: Creating True Love at Home & Peace on the Planet," providing a "unified field theory" for peace by illuminating the connections between nuclear war, conventional war, interpersonal war, and war within our own psyches.

ACADEMIC APPOINTMENTS
• Emeritus Faculty, Acad Council, Electrical Engineering
• Affiliate, Stanford Woods Institute for the Environment

HONORS AND AWARDS
• A. M. Turing Award, ACM (2015)
• Member, National Inventor's Hall of Fame (2011)
• Hamming Medal, IEEE (2010)
• Member, National Academy of Engineering (2002)
• International Fellow, Marconi Society (2000)
• Pioneer Award, Electronic Frontier Foundation (1994)
• Outstanding Professor, Stanford Society of Chicano and Latino Engineers (1989)
• Outstanding Professor, Stanford Society of Black Scientists and Engineers (1989)

PROGRAM AFFILIATIONS
• Science, Technology and Society

Publications

PUBLICATIONS
• Cybersecurity, Nuclear Security, Alan Turing, and Illogical Logic  COMMUNICATIONS OF THE ACM
  Hellman, M. E.
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Hellman, M. E., ACM
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KARNIN, E. D., Greene, J. W., HELLMAN, M. E.
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HELLMAN, M. E.

ON THE SECURITY OF MULTIPLE ENCRYPTION COMMUNICATIONS OF THE ACM
Merkle, R. C., HELLMAN, M. E.
1981; 24 (7): 465-467

ON MULTIPLE ENCRYPTION SECURITY - REPLY COMMUNICATIONS OF THE ACM
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HELLMAN, M. E.
1980; 26 (4): 401-406

PRIVACY AND AUTHENTICATION - INTRODUCTION TO CRYPTOGRAPHY PROCEEDINGS OF THE IEEE
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1979; 67 (3): 397-427

CONVOLUTIONAL ENCODING FOR WYNER WIREDAP CHANNEL IEEE TRANSACTIONS ON INFORMATION THEORY
Verriest, E., HELLMAN, M. E.
1979; 25 (2): 234-236

FOILING COMPUTER CRIME .1. DES WILL BE TOTALLY INSECURE WITHIN 10 YEARS IEEE SPECTRUM
HELLMAN, M. E.
MATHEMATICS OF PUBLIC-KEY CRYPTOGRAPHY  *SCIENTIFIC AMERICAN*

HELLMAN, M. E.

1979; 241 (2): 146-7?

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Merkle, R. C., HELLMAN, M. E.

1978; 24 (5): 525-530

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LEUNGYANCHEONG, S. K., HELLMAN, M. E.

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Diffie, W., HELLMAN, M. E.

1976; 22 (6): 644-654

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CARLEIAL, A. B., HELLMAN, M. E.

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  HELLMAN, M. E.
  
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  HELLMAN, M. E.
  
  1974; CO22 (10): 1690-1693