Curriculum Vitae Silvio Micali

Ford Professor of Engineering
Electrical Engineering and Computer Science Department
Stata Center, Room G644, 32 Vassar Street, Cambridge, MA 02139
617 253 5949
silvio@csail.mit.edu

14 January 2017

Personal Data

Born in Palermo, Italy, October 13, 1954. U.S. and Italian citizen

Education

- Laurea (cum laude) in Mathematics, University of Rome, March 1978
- Ph.D. in Computer Science, University of California—Berkeley, December 1983

Scientific Interests

- Cryptography
- Secure Protocols
- Pseudo-Random Number Generation
- Proof Systems
- Distributed Computation
- Zero Knowledge
- Mechanism Design

Selected Awards

- Turing Award (Computer Science)
- Gödel Prize (in Theoretical Computer Science)
- RSA Prize (in Cryptography)
- TCC Test-Of-Time Award (in Cryptography)
- Member, National Academy of Sciences
- Member, National Academy of Engineering
- Member, American Academy of Arts and Sciences
- Fellow, International Association of Cryptographic Research
- Palermitano nel Mondo

- Chair Professor, Tsinghua University
- Rademacher Lecturer, University of Pennsylvania
- Distinguished Alumnus Award, Computer Science and Engineering, UC Berkeley
- Laurea ad Honorem, University of Salerno
- Carnegie Corporation's "Great Immigrants: Pride of America"
- Thomas M. Menino Award

Academic Appointments

Institution	Position	Period
MIT	Associate Head, EECS Dept.	2015-
MIT	Full Professor	1991-
MIT	Tenured Associate Professor	1988-1991
MIT	Associate Professor	1986-1988
MIT	Assistant Professor	1983-1986
University of To	ronto Post-doctoral Fellow	1982-1983

Doctoral Students

- Zeyuan Allen-Zhu, Post Doc Princeton University (PhD, Summer 2015)
- Alessandro Chiesa, *UC Berkeley* (PhD September 2014)
- Pablo Azar, PhD Student in Economics at MIT, (EECS PhD September 2014)
- Jing Chen, Stony Brook University (PhD September 2012)
- Dr. Paul Valiant, *Brown University* (PhD June 2008)
- Prof. Rafael Pass, Cornell University (PhD. June 2006)
- Dr. Matt Lepinski, BBN Technologies (PhD. June 2006)
- Prof. Chris Peikert, *GeorgiaTech* (PhD. June 2006)
- Prof. Abhi Shelat, *University of Virginia* (PhD. December 2005)
- Prof. Moses Liskov, William and Mary (PhD. June 2004)
- Prof. Leo Reyzin, Boston University (PhD. June 2001)
- Dr. Rosario Gennaro, *IBM*, (PhD. June 1996)
- Dr. Halevi, Shai, *IBM*, (PhD. June 1997)
- Dr. Ray Sidney (PhD. June 199)
- Prof. Rafail Ostrovsky, *University of California—Los Angeles* (PhD. June 1992)
- Prof. Mihir Bellare, University of California—Sand Diego (PhD.September 1991)
- Prof. Phil Rogaway, *University of California---Davis* (PhD. June 1991)
- Prof. Bonnie Berger, Massachusetts Institute of Technology (PhD. May 1990)

- Prof. Claude Crepeau, *University of Montreal* (PhD. February 1990)
- Dr. Pesech Feldman 1988

Post-Doctoral Fellows Hosted

- Dr. Alon Rosen
- Dr. Tal Rabin
- Dr. Oded Goldreich

Additional Professional Activities

- Associate Department Head, EECS Department, MIT
- Member, European Research Council

Books

Randomness and Computation. S. Micali Editor, 5th volume of the series "Advances in Computing Research", JAI Press, December, 1989

Papers

JOURNALS

1. Minimal forms in A-Calculus computations

Boehm C. and Micali S.

Journal of Symbolic Logic, 45, March 1980, pp. 165-171

2. Two way deterministic finite automata are exponentially more succinct than sweeping automata Micali S.

Information Processing Letters, 12 n. 2, April 13, 1981, pp. 103-105

3. Probabilistic Encryption,

Goldwasser S. and Micali S.

Journal of Computer and System Sciences, 28 n. 2, April 1984, pp 270-299

4. How to generate Cryptographically Strong Sequences of Pseudo-Random Bits

Blum M. and Micali S.

SIAM Journal on Computing, 13 no.4, November 1984, pp. 850-864

5. Priority Queues with variable priority and an O(EV log V) Algorithm for finding a maximum weighted matching in general graphs

by Galil Z., Micali S. and Gabow H.

SIAM Journal on Computing, 15 n. 1, February 1986, pp. 120-130

6. How to Construct Random Functions

Goldreich 0., Goldwasser S. and Micali S.

Journal of ACM, 33 n. 4, October 1986, pp. 792-807

7. The Notion of Security for Probabilistic Cryptosystems

Micali S., Rackoff C. and Sloan B.

SIAM Journal on Computing, 17 n. 2, April 1988, pp. 412-426

8. A Digital Signature Scheme Secure Against Adaptive Chosen-Message Attack

Goldwasser S., Micali S., and Rivest R.

SIAM Journal of Computing, 17 no 2, April 1988, pp. 281-308

9. The Knowledge Complexity of Interactive Proof-Systems

Goldwasser S., Micali S. and Rackoff C.

SIAM Journal on Computing, 18 n. 1, Feb. 1989, pp. 186-208

10. A Fair Protocol for Signing Contracts

Ben-Or M., Goldreich O., Micali S. and Rivest R.

IEEE Trans. on Information Theory, 36 n. 1, January 1990. pp.40-46

 $11. \textit{Proofs That Yield Nothing But their Validity, Or, All Languages in NP Have Zero-Knowledge \textit{Proofs}}$

Goldreich 0., Micali S. and Wigderson A.

Journal of ACM, 38 n. 3, July 1991, pp. 691-729

12. Efficient, Perfect Polynomial Random Number Generators

Micali S. and Schnorr C.

Journal of Cryptography, 3 n. 3, September 1991, pp.157-172

13. Non-Interactive Zero-Knowledge

Blum M., De Santis A., Micali S. and Persiano G.

SIAM J. on Computing, 20, December 1991, pp. 1084-1118

14. How To Sign Given Any Trap-door Function

Bellare M. and Micali S. Journal of ACM, 39, January 1992, pp. 214-233

15. Mechanism for the T4 Lymphopenia of AIDS

Micali S.

Proc. Natl. Acad. Sci. USA, Vol. 90, pp.10982-10983, December 1993

16. On-Line/Off-Line Digital Signatures

S. Even, 0. Goldreich and S. Micali.

Journal of Cryptography, 1996, 9, pp.35-67

17. A secure Protocol for the Oblivious Transfer

M. Fischer, S. Micali, and C. Rackoff.

Journal of Cryptography, 1996, pp. 1-5

18. An Optimal Probabilistic Algorithm for Synchronous Byzantine Agreement

P. Feldman and S. Micali.

SlAM Journal on Computing, August 1997

19. Reducibility and Completeness In Multi-Party Private Computations

J. Kilian, E. Kushilevitz, S. Micali, and R. Ostrovsky

SIAM J. on Computing, Vol. 29 Number 4 pp. 1189-1208, 2000

20. Computationally Sound Proofs

Silvio Micali

SICOMP Vol. 30, Number 4, pp.1253-1298, 2000

21. Improving the Exact Security of Digital Signature Schemes

S. Micali and L. Reyzin Journal of Cryptography, 15, Winter 2002

22. Optimal Error Correction for Computationally Bounded Noise

S. Micali, C. Peikert, M. Sudan, and D. Wilson

IEEE Transactions on Information Theory, vol. 56, No. 11, November 2010, pp. 5673-5680

23. Perfect Implementation

S. Izmalkov, M. Lepinski, and S. Micali

Games and Economic Behavior, vol. 71, Issue 1, January 2011, pp. 121-140

24. Collusive Dominant-Strategy Truthfulness

J. Chen and S. Micali

Journal of Economic Theory, vol. 147, Issue 3, May 2012, Pages 1300-1312.

25. The Order Independence of Iterated Dominance in Extensive Games

J. Chen and S. Micali

Theoretical Economics (TE), Vol. 8, No. 1, January 2013, pp. 125-164

26. Security Miracles, Secure Auctions, Matching Problem Verification

S. Micali and M. Rabin

Transactions of the ACM, Vol. 57. No. 2, February 2014, pp. 85-93

27. The Query Complexity of Scoring Rules

P. Azar and S. Micali

Transactions on Economics and Computation (TEAC), Volume 2, Issue 3, Article 10, July 2014

28. Sparse Johnson-Lindestrauss Matrices: Compression with Neurobiology-Based Constraints

Z. Allen-Zhu, R. Gelashvili, S. Micali, and N. Shavit

Proceedings of the National Academy of Sciences (PNAS), November 2014

29. Mechanism Design with Possibilistic Beliefs

J. Chen and S. Micali

Journal of Economic Theory (JET), Vol. 156, pp. 77-102, March 2015.

30. Tight Revenue Bounds with Possibilistic Beliefs and Level-k Rationality

J. Chen, S. Micali, and R. Pass

Econometrica, Vol. 83, No. 4 (July, 2015), 1619–1639

31. Knightian Analysis of the Vickrey Mechanism

Z. Allen-Zhu, A. Chiesa, and S. Micali

Econometrica, Vol. 83, No. 5 (September, 2015), 1727–1754

32. Physically Unclonable Values, Unforgeable Banknotes, and the Authentication of Arbitrary Objects

S. Devadas and S. Micali

Communications of the ACM, to appear.

33. Reconstructing Markov Processes from Independent Anonymous Experiments

- Z. Allen-Zhu and S. Micali
- J. of Discrete Mathematics, Vol. 200, Issue C, pp 108-122, February 2016

34. Leveraging Possibilistic Beliefs in Unrestricted Combinatorial Auctions

J. Chen and S. Micali

Games, 2016, 7, 32; doi:10.3390/g7040032

REFEREED CONFERENCES AND WORKSHOPS

35. Residually complete strategies and cofinal strategies

Micali S.

Lambda Calcul et semantique formel des languages de programmation,

Actes de la 6Eme Ecole de Printemps d'Informatique Theorique, La Châtre 1978

36. An O(E^{1/2}V) Algorithm for finding a maximum matching in general graphs

Micali S. and Vazirani V.

21st Foundations of Computer Science (FOCS), Oct. 1980, pp 17-28

37. Probabilistic Encryption and How to Play Mental Poker Keeping Secret All Partial Information Goldwasser S. and Micali S.

14th Symp. on Theory of Computing (STOC), San Francisco, CA, May 1982, pp.365-377

38. Why and how to establish a private code

Goldwasser S., Micali S. and Tong P.

23rd Foundations of Computer Science (FOCS), Chicago, Illinois, Nov. 1982, pp. 134-144

39. Strong Signature Schemes

Goldwasser S., Micali S. and Yao A.

15th Symp. on Theory of Computing (STOC), Boston, Massachusetts, May 1983, pp. 431-439

40. How to simultaneously exchange a secret bit by flipping a symmetrically-biased coin

Luby M., Micali S. and Rackoff C.

24th Foundations of Computer Science, November 1983, Arizona, pp.11-22

41. On the cryptographic applications of poly-random function

Goldreich O., Golwasser S. and Micali S.

CRYPTO 84, Santa Barbara, California pp. 276-288

42. Verifiable secret sharing and achieving simultaneity in the presence of faults

Chor B., Goldwasser S., Micali S. and Awerbuch B.

Foundations of Computer Science (FOCS), Portland, Oregon, Oct. 1985, pp. 383-395

43. Byzantine agreement in constant expected time (and trusting no one), by

Feldman P. and Micali S.

Foundations of Computer Science (FOCS), Portland, Oregon, Oct, 1985, pp. 267-276

44. Dynamic Deadlock Resolution Protocols

Awerbuch B. and Micali S.

Foundations of Computer Science (FOCS), Toronto, Canada, Oct. 1986, pp. 196-207

45. Proofs That Yield Nothing But Their Validity and a Methodology of Cryptographic Protocol Design

Goldreich O., Micali S. and Wigderson A.

Foundations of Computer Science (FOCS), Toronto, Canada, Oct. 1986, pp. 174-186

46. How to Play any Mental Game or A completeness Theorem for Distributed Protocols with Honest Majority Goldreich 0., Micali S. and Wigderson A.

19th Symp. on Theory of Computing (STOC), New York, NY, May 1987, pp. 218-229

47. Non-Interactive Zero-Knowledge And Its Applications

Blum M., Feldman P. and Micali S.

20th Symp. on Theory of Computing (STOC), Chicago, Ill, May 1988, pp. 103-112

48. Optimal Algorithms For Byzantine Agreement,

Feldman P. and Micali S.

20th Symp. on Theory of Computing (STOC), Chicago, Ill, May 1988, pp. 32-42

49. Everything provable is provable in zero knowledge

Ben-Or M., Goldreich O., Goldwasser S., Hastad J., Kilian J., Micali S. and Rogaway P. CRYPTO 88, Santa Barbara, CA, August 1988, pp. 37-56

50. Super efficient, perfect pseudo-random number generators

Micali S. and Schnorr C.

CRYPTO 88, Santa Barbara, CA, August 1988, pp. 173-198

51. An Improvement of the Fiat-Shamir Signature Identification and Signature Scheme

Micali S. and Shamir A.

CRYPTO 88, Santa Barbara, CA, August 1988, pp. 244-247

52. Non-Interactive zero-knowledge proof systems with auxiliary language

De Santis A., Micali S. and Persiano G.

CRYPTO 88, Santa Barbara, CA, August 1988, pp. 269-282

53. Perfect Pseudo-Random Generation

Micali S.

IFIP 11th World Computer Congress, San Francisco, CA, August 1989. pp. 121-126

54. Minimum Resource Zero-Knowledge Proofs

Kilian J., Micali S. and Ostrovsky R.

30th Foundations of Comp. Sci. (FOCS), Research Triangle Park, North Carolina, Oct. 1989, pp. 474-479

55. Perfect Zero Knowledge in Constant Rounds

Bellare M., Micali S. and Ostrovsky R.

22nd Symp. on Theory of Computing (STOC), Baltimore, Maryland, May 1990, pp. 482-493

56. The True Complexity of Statistical Zero Knowledge

Bellare M., Micali S. and Ostrovsky R.

22nd Symp. on Theory of Computing (STOC), Baltimore, Maryland, May 1990, pp. 494-502

57. The Round Complexity of Secure Protocols, by

Beaver D., Micali S. and Rogaway P.

22nd Symp. on Theory of Computing (STOC), Baltimore, Maryland, May 1990, pp. 503-513

58. Collective Coin Flipping Without Assumptions nor Broadcasting

Micali S. and Rabin T.

CRYPTO 90, Lecture Notes in Computer Science, Vol. 537, Springer Verlag, 1990, pp. 253-266

59. Secure Computation

S. Micali and P. Rogaway

CRYPTO 91, Lecture Notes in Computer Science, Vol. 576, Springer Verlag, 1992, pp. 392-404

60. Fair Public-Key Cryptosystems

S. Micali

CRYPTO 92, Santa Barbara, CA, August 1992, pp. 3-11- 3-24

61. New Approaches to Secret-Key Agreement

T. Leighton and S. Micali

CRYPTO 93, Santa Barbara, CA, August 1993, pp. 38.1-38.11

62. A Simple Method for Generating and Sharing Pseudo-Random Functions, with Applications to Clipper-Like Key

Escrow Systems

S. Micali and R. Sidney,

CRYPTO 95, Santa Barbara, CA, August 1995

63. Practical and Provably-Secure Commitment Schemes from Collision-Free Hashing

S. Halevi and S. Micali

CRYPTO 96, Santa Barbara, CA, August 1996

64. Efficient Certificate Revocation

S. Micali

RSA97, San Francisco, CA, January 1997

65. Certified E-Mail with Invisible Post Offices

S. Micali

RSA 97, San Francisco, CA, January 1997

66. Computationally Sound Checkers For NP-complete Problems

S. Micali

Mathematical Foundations of Computer Science 98, Prague, August 1998

67. Computationally Private Information Retrieval

C. Cachin, S. Micali, and M. Stadler

EUROCRYPT 99, Prague, Check Republic, May 1999

68. Lower Bounds for Oblivious Transfer Reductions

Y. Dodis and S. Micali

EUROCRYPT 99, Prague, Check Republic, May 1999

69. The All-Or-Nothing Nature of Secure Computation

Beimel A., T. Malkin and S. Micali

CRYPTO 99, Santa Barbara, CA, August 1999

70. Verifiable Random Functions

S. Micali, M. Rabin and S. Vadhan

40th Foundations of Computer Science (FOCS), New York, Oct 1999

71. Public-key Encryption in a Multi-User Setting: Security Proofs and Improvements by

M. Bellare, A. Boldyreva, and S. Micali

EUROCRYPT 2000, Bruges, Belgium, May 2000

72. Resettable Zero Knowledge

C. Canetti, O. Goldreich, S. Goldwasser, and S. Micali

32nd Symposium On Theory of Computing (STOC), Portland, Oregon, May 2000

73. Parallel Reducibility

Y. Dodis and S. Micali

CRYPTO 2000, Santa Barbara, CA, August 2000

74. Amortized E-Cash

M. Liskov S. Micali

Financial Cryptography 2001, Anguilla, BWI, February 2001

75. Min-Round Resettable Zero Knowledge

S. Micali and L. Reyzin

EUROCRYPT 2001, May 2001

76. Resettable Identification

M. Bellare, M. Fischlin, S. Goldwasser, and S. Micali EUROCRYPT 2001, May 2001

77. Accountable-Subgroup Multisignatures

S. Micali, K. Ohta, and L. Reyzin

8th ACM Conference on Computer and Communications Security, Philadelphia, Pennsylvania, November 2001

78. Mutually Independent Commitment

M. Liscov, A. Lysyanskaya, S. Micali, L. Reyzin and A. Smith ASIACRYPT 2001

79. Fractal Merkle Tree Representation and Traversal

M. Jacobson, T. Leighton, S. Micali, and M. Szydlo RSA 2003, San Francisco, CA, April 2003

80. Micropayments Revisited

S. Micali and R. Rivest RSA 2002, San Jose, CA, 2002

81. Plaintext Awareness via Key Registration

J. Herzog, M. Liscov and S. Micali

CRYPTO 2003, Santa Barbara, CA, August 2003

82. Simple and Fast Optimistic Protocols for Fair Electronic Exchange

S. Micali

Principles of Distributed Computing Conference (PODC), 2003, Needham, MA 2003

83. NOVOMODO: Scalable Certificate Validation and Simplified PKI Management

S. Micali

Proceedings 1st Annual PKI Research Workshop, NISTIR 7059, October 2003

84. Zero-Knowledge Sets.

S. Micali, M. Rabin and J. Kilian

Foundations of Computer Science (FOCS), Cambridge, MA, October 2003

85. Tamper Proof Security: Theoretical Foundations for Security Against Hardware Tampering

R. Gennaro, A. Lysyanskaya, T. Malkin, S. Micali and T. Rabin

1st Theory of Cryptography Conference, Cambridge (TCC), Mass, February 2004

86. Physically Observable Cryptography

S. Micali and L. Reyzin

1st Theory of Cryptography Conference (TCC), Cambridge, Mass, February 2004

87. Sequential Aggregate Signatures from Trapdoor Permutations

A. Lyssyanskaya, S. Micali, L. Reyzin, and H. Shacham

EUROPRYPT 2004, Interlaken, Switzerland, May 2004

88. Completely Fair SFE and Coalition-Stable Cheap Talk

M. Lepinski, S. Micali, C. Peikert, and A. Shelat

PODC 2004, Canada, July 2004

89. Fair Zero Knowledge

M. Lepinski, S. Micali, and A. Shelat

Theory of Cryptography Conference (TCC), Cambridge, MA, February 2005

90. Optimal Error Correction Against Computationally Bounded Noise

S. Micali, C. Peikert, M. Sudan, and D. Wilson

Theory of Cryptography Conference (TCC), Cambridge, MA, February 2005

91. Collusion-Free Protocols

M. Lepinski, S. Micali, and A. Shelat

Symposium on Theory of Computing (STOC), Baltimore, ME, May 2005

92. Rational Secure Computation and Ideal Mechanism Design

S. Izmalkov, M. Lepinski and S. Micali

Foundation of Computer Science Conference (FOCS), Pittsburgh, PA, October 2005

93. Local Zero Knowledge

S. Micali and R. Pass

Symposium on Theory of Computing (STOC), Baltimore, ME, May 2006

94. Independent Zero-Knowledge Sets

R. Gennaro and S. Micali

33rd International Colloquium on Automata Languages and Programming (ICALP), Venice, Italy, July 2006

95. Input-Indistinguishable Computation

S. Micali, R. Pass, and A. Rosen

Foundation of Computer Science Conference (FOCS), Berkeley, CA, October 2006

96. Online-Untransferable Signatures

M. Liskov and S. Micali

PKC2008

97. Verifiably Secure Devices (and Correlated Equilibrium)

S. Izmalkov, M. Lepinski, and S. Micali

Theory of Cryptography Conference (TCC), New York, February 2008

98. Truly Rational Secret Sharing

S. Micali and abhi shelat

Theory of Cryptography Conference (TCC), San Francisco, March 2009

99. A New Approach to Auctions and Mechanism Design

J. Chen and S. Micali

Symposium on Theory of Computing (STOC), Washington, DC, May/June 2009

100. Guaranteeing Perfect Revenue From Perfectly Knowledgeable Players

J. Chen, A. Hassidim, and S. Micali

Innovations in Computer Science (ITCS), Beijing, China, January 2010

101. Leveraging Collusion in Combinatorial Auctions

J. Chen, S. Micali, and P. Valiant

Innovations in Computer Science (ITCS), Beijing, China, January 2010

102. Concrete And Perfect Implementation of Arbitrary Mechanisms

(A quick summary of joint work with Sergei Izmalkov and Matt Lepinski)

S. Micali

BQGT'10 May 14-16, 2010 Newport Beach, California USA

103. Safe Rationalizability and Mechanism Design

J. Chen and S. Micali

2nd Brazilian Workshop on Game Theory, July 29-August 4, 2010, Sao Paulo, Brazil

104. Crowdsourced Bayesian Auctions

P. Azar, J. Chen, and S. Micali

Innovations in Theoretical Computer Science (ITCS), Jan 2012

(Also: North American Summer Meeting of the Econometric Society, St. Luis, June 2011)

105. Knightian Auctions

A. Chiesa, S. Micali, and Z. Zhu

Innovations in Theoretical Computer Science (ITCS), Jan 2012

106. Rational Proofs

P. Azar and S. Micali

Symposium on Theory of Computing (STOC), May 2012

107. Parametric Digital Auctions

P. Azar and S. Micali

Innovations in Theoretical Computer Science (ITCS), Jan 2013

108. Optimal and Efficient Parametric Auctions

P. Azar, C. Daskalakis, M. Weinberg, and S. Micali

Symposium on Discrete Algorithms (SODA) Jan 2013

109. Knightian Self-Uncertainty in the VCG Mechanism in Unrestricted Combinatorial Auctions

A. Chiesa, S. Micali, and Z. Zhu

Economics and Computation (EC), 2014

110. Better Outcomes from More Rationality

J. Chen, S. Micali, and R. Pass

Innovations in Theoretical Computer Science (ITCS), Jan 2015

111. Single-Good Auctions with Externalities

J. Chen and S. Micali

2015 Econometric Society World Congress

112. Mechanisms with Costly Knowledge

A. M. Ileri and S. Micali

2016 Innovations in Theoretical Computer Science

113. Auction Revenue in the General Spiteful-Utility Model

J. Chen and S. Micali

2016 Innovations in Theoretical Computer Science

114. Fast and Furious Byzantine Agreement

S. Micali

2017 Innovations in Theoretical Computer Science

Lectures

"Residually complete strategies and cofinal strategies"

1. École d'Informatique Theorique, La Chatre, 1978

2. University of Rome, July 1980

"An $0\{V^{1/2}E\}$ algorithm for maximum matching in general graphs"

- 3. Foundations of Computer Science Conference, Syracuse, October 1980.
- 4. University of California -Berkeley, November 1980
- 5. University of Toronto, Spring 1982

"Coin Flipping by telephone"

- 6. Massachusetts Institute of Technology, LOS, December 1981
- 7. University of California -Berkeley, December 1981
- 8. Stanford University, Spring 1982
- 9. Brown University, Spring 1982
- 10. Pennsylvania State University, Spring 1982
- 11. University of Toronto, Spring 1982
- 12. IBM Research Yorktown Heights, Spring 1982
- 13. Bell Laboratories, Spring 1982
- 14. Cornell University, Spring 1982
- 15. Columbia University, Spring 1982
- 16. New York University, Spring 1982
- 17. Xerox Park, Spring 1982
- 18. University of Southern California, Spring 1982
- 19. University of Rome, July 1982

"How to generate cryptographically strong sequences of pseudo-random bits"

- American Mathematical Society Conference on Probabilistic Methods, June 1982
- 21. Foundations of Computer Science Conference, Chicago, November 1982
- 22. 1983 Theory Day, Columbia University, Spring 1983
- 23. Yale University, Spring 1983
- 24. Carnegie Mellon University, Spring 1983

- 25. University of Waterloo, Spring 1983
- 26. Massachusetts Institute of Technology -Applied Mathematics, Spring 1983
- 27. University of New York at Buffalo, Spring 1983
- 28. University of Pisa, July 1983
- 29. Mathematisch centrum, Amsterdam, November 85

"Probabilistic Encryption"

30. University of Toronto, Fall 1982

"Probabilistic Digital Signatures"

- 31. Harvard University, Spring 1983
- 32. Symposium on Theory of Computing, Boston, MA, Spring 1983

"How to simultaneously exchange a secret bit"

- 33. University of California -Berkeley, June 1983
- 34. Yale University, June 1983
- 35. University of Toronto, June 1983
- 36. University of Zurich, July 1983
- 37. Massachusetts Institute of Technology, Fall 1983
- 38. University of Chicago, March 1984

"A provably correct oblivious transfer"

39. Eurocrypt '84, Paris, April 1984

"How to construct Random Functions"

- 40. University of Toronto, December 1983
- 41. Days of Study of Algorithms (Opening lecture), Rome, January 1984
- 42. University of Pittsburgh, February 1984
- 43. University of California -Berkeley, March 1984
- 44. IBM Research -San Jose, March 1984
- 45. University of Chicago, March 1984
- 46. Rensselaer Polytechnic Institute, Spring 1984

- 47. Foundations of Computer Science Conference, Florida, October 1984
- 48. Mathematisch centrum, Amsterdam, November 1985

"Interactive proof systems"

- 49. University of Chicago, March 1984
- 50. University of California -Berkeley, March 1984
- 51. Massachusetts Institute of Technology, May 1984
- 52. Boston College, Boston, MA, February 1986

"Knowledge Complexity"

- 53. American Mathematical Society Meeting, Complexity Theory Day, August 1984
- 54. Massachusetts Institute of Technology, LCS, December 1984
- 55. University of Southern California, January 1985
- 56. University of California-Berkeley, January 1985
- 57. University of Toronto, February 1985
- 58. Cornell University, February 1985
- 59. Symposium on Theory of Computing, Providence, RI, May 1985
- 60. Brown University, Providence, RI, September 1985
- 61. Boston University, Boston, MA, October 1985

"How to transform a semi-synchronous network to a simultaneous one"

- 62. Harvard University, December 1984
- 63. IBM-San Jose, January 1985

"A protocol for signing contracts fairly"

64. Colloquium on Automata, Languages and Programming, Nafplio, Greece, July 1985

"A Methodology for Proving the Correctness of Cryptographic Protocols"

- 65. Brown University, Providence, Ill, October 1985
- 66. Mathematisch Centrum, Amsterdam, The Netherlands, November 1985

67. Dartmouth University, Hanover, NH, January 1986

"Knowledge and Efficient Computation"

68. First Conference on Theoretical Aspects of Reasoning About Knowledge, Asilomar, CA, March 1986

"Proofs That Release Minimum Knowledge

69. Conference on Randomness and Computation, Marseille, France, March 1986

"All of NP possess Zero-Knowledge Proofs"

- 70. Workshop on Probabilistic Computation, Luminy, France, March 1986
- 71. University of Toronto, Toronto, Canada, April 1986

"All You Always Wanted From a Cryptographic Protocol and Never Dared to Ask"

72. LCS, MIT, Cambridge, MA, May 1986

"How to Compile Protocols for Reliable Players to Equivalent Fault-Tolerant Protocols"

- 73. Mathematical Sciences Research Institute, Berkeley, CA, May 1986
- 74. Yale University, April 1986

"Recent Trends in Complexity Based Cryptography"

75. Centro Ricerche per le Applicazioni Industriali, July 1986

"Proofs, Knowledge and Computation"

- 76. Mathematical Foundations of Computer Science Conference, Bratislava, Czechoslovakia, August 1986
- 77. York University, Toronto, Canada, October 1986
- 78. Meeting on Complexity Theory, Oberwolfach, Germany, November 1986
- 79. Carnegie-Mellon University, Pittsburgh, PENN, December 1986
- 80. IEEE Information Theory Workshop, Bellagio, Italy, June 1987
- 81. Interdisciplinary Conference on Randomness, Columbus, Ohio, April 1988
- 82. University of Illinois at Urbana Champaign, Urbana, Illinois, October 1988
- 83. Mathematics Colloquium, Princeton University, Princeton, New Jersey, October 1988

84. Foundation of Computer Science Conference, Toronto, Canada, October 86

"The Completeness Theorem for Protocols with Honest Majority"

- 85. University of Salerno, Salerno, Italy, July 86
- 86. Yale University, New Haven, CONN, December 86
- 87. University Of Rome, Rome, Italy, January 87
- 88. University Of Toronto, Toronto, Canada, March 87
- 89. 19th ACM Symp. on Theory of Computing, New York, NY, May 87
- 90. University of Zurich, Zurich, Switzerland, July 87

"Interactive Proofs, Zero Knowledge, and Applications"

91. Center for intelligent control Systems, MIT, May 1988

"Byzantine Agreement in constant expected time"

92. Yale University, New Haven, CONN, July 1987

"Nothing But The Truth"

93. 25th Anniversary of the Laboratory for Computer Science, MIT, November 1988

"An optimal Algorithm for Byzantine Agreement from Scratch II

- 94. Meeting on Complexity Theory, Oberwolfach, Germany, November 1988
- 95. Workshop on Randomness and Computation, MIT, November 1988
- 96. Technion, Haifa, Israel, January 1989
- 97. 16th International Colloquium on Automata, Languages and Programming, Stresa, Italy, July 1989
- 98. Carnegie Mellon University, Pittsburg, Penn., October 1989

"Non-Interactive Zero-Knowledge and Security Against Chosen Cyphertext Attack"

99. CRYPTO 88, Santa Barbara, California, August 1988

"Efficient, Perfect Pseudo-Random Generation"

100. CRYPTO 88, Santa Barbara, California, August 1988

"Digital Signatures: From Theory to Practice

101. National Security Agency Course of Instruction, MD, February 1989

"Perfect Zero-knowledge, Constant- Round Proof for Graph Isomorphism"

- 102. University of California, Berkeley, CA, May 1989
- 103. University of Toronto, Toronto, Canada, June 1989

"How to collectively flip a coin"

- 104. Scuola Normale Superiore, Pisa, Italy, July 1989
- 105. CRYPTO 89, Santa Barbara, CA1 August 1989

"On-line/Off-line Digital Signatures"

106. Crypto 89, Santa Barbara, CA, August 1989

"Digital Signatures: The Evolution of A Fundamental Primitive"

107. CRYPTO 89, Santa Barbara, CA, August 1989

"Perfect Pseudo-Random Number Generation"

108. 11th World Computer Congress, San Francisco, CA, August 1989

"Proving Properties of Physically Hidden Data"

- 109. International Computer Science Institute, Berkeley, CA, August 1989
- 110. International Workshop on Cryptography, Oberwolfach, Germany, September 1989

"Card Games Are Universal"

- 111. University of Rome, Rome, Italy, January 1990
- 112. University of Toronto, Toronto, Ontario, Canada, January 1990

"Probabilistic Proofs and Their Applications"

113. American Association for the Advancement of Science Meeting, New Orleans, LA, February 1990

"Zero-Knowledge Proofs and Their Applications"

- 114. Harvard University, Cambridge, MA, April 1990
- 115. Yale University, New Haven, CT, April 1990

"The Round Complexity of Secure Protocols"

- 116. Princeton University, Princeton, NJ, May 1990
- 117. Theory Day, University of Maryland, MD, November 1990

"Verifiable Secret Sharing"

118. Laboratory for Computer Science, MIT, May 1990

"Cryptographic Security"

119. Center for Advanced Engineering, Study, MIT, May 1990

"Secure Computation"

120. MIT's Lab for Computer Science Summer Meeting, Chatham, Mass, June 1990

"The Security of Digital Signature Schemes"

121. Algorithms and Complexity, 2nd International School for Computer Science Researchers, Acireale, Italy, June, 1990

"The Security of Public Key Cryptosystems"

122. Algorithms and Complexity, 2nd International School for Computer Science Researchers, Acireale, Italy, June, 1990

"A Pseudo-Random Generator Based on the Discrete Logarithm"

123. Algorithms and Complexity, Second International School for Computer Science Researchers, Acireale, Italy, June, 1990

"Simple and Efficient Primality Testing"

124. Algorithms and Complexity, Second International School for Computer Science Researchers, Acireale, Italy, June, 1990

"Digital Security for Bank Transactions"

125. Banca d'Italia, Rome, Italy, July, 1990

"Collective Coin Flipping Without Assumptions nor Broadcasting"

126. Crypto 90, Santa Barbara, California, August 1990

"Perfect Verifiable Secret Sharing Without Broadcasting"

127. Crypto 90, Santa Barbara, California, August 1990

"The Notion of Secure Computation"

128. DIMACS Workshop on Cryptography, Princeton University, Princeton, New Jersey, October 1990

"Secure Personal Identification"

- 129. Texas Instruments, TX, November 1990
- 130. EECS Colloquium, MIT, April 1991

"Zero-Knowledge Proofs"

131. Italian Mathematical Society, Bologna, Italy, May 1991

"The Notion of Secure Computation"

132. Crypto '91 Conference, Santa Barbara, CA, August 1991

"Probabilistic Potential: A Theory of T- Cell Differentiation"

133. Institut Pasteur, Paris, France, January 1992

"A Mechanism for AIDS' T4-Cell Loss"

- 134. International Computer Science Institute, Berkeley, CA, August 1992
- 135. Laboratory for Computer Science, MIT, Cambridge MA, November 1992
- 136. Cornell University, April 1993
- 137. 25th Annual ACM Symposium on the Theory of Computing (Special, out-of-program Lec- ture), San Diego, CA, May 1993
- 138. 37th Joint National Meeting of The Institute for Management Sciences/Operation Research Society of America, Boston, MA: April 1994

"Fair Public-Key Cryptosystems"

- 139. Crypto '92 Conference, Santa Barbara, CA, August 1992
- 140. 1992 Conference on Complexity Theory, Oberwolfach, Germany, November 1992
- 141. National Institute for Standard and Technology, Gaithersburg, MD, November, 1992
- 142.MIT-U.S. Government Workshop on Fair Cryptosystems, MIT, Cambridge, MA, April 1993
- 143. University of California, Berkeley, May 1993

"Advances in Cryptography"

145.12th World Computer Congress, Madrid, Spain, September 1992

"Computation has Short Certificates"

146. Cornell University, Ithaca, NY, April1993

147. University of Toronto, Toronto, Canada, April 1993

148. State University of New York, Buffalo, NY, May 1993

149. University of California, Berkeley, CA, May 1993

150.Laboratory for Computer Science, MIT, June 1993

151. Harvard University, Cambridge, MA, October 1993

"New Approaches to Secret-Key Exchange"

152. Crypto 93 Conference, Santa Barbara, CA, August 1993

"Fair Cryptosystems and the Clipper Chip"

- 153. National Institute of Standards and Technology, Gaithersburg, MD, November 1993
- 154. The Boston Chapter of the ACM, Cambridge, MA, November 1993

"CS Proofs"

- 155. University of Rome, Rome, Italy, December 1993
- 156. Weizmann Institute of Sciences, Rehovot, Israel, January 1994
- 157. Yale University, New Haven, Connecticut, February 1994

"Which Key Escrow, If Any?"

- 158. MIT, Laboratory for Computer Science, April 1994
- 159. Eurocrypt 94, Perugia, Italy, May 1994
- 160. National Institute of Standards and Technology, Gaithersburg, MD, June 94

"CS Proofs and Computational Correctness"

- 161. University of Rome, Rome, Italy, July 94
- 162. International Combinatorics Conference in Honor of Adriano Garsia, Taormina, Italy, July 1994

- 163. University of California, Berkeley, CA, August 94
- 164. University of Toronto, Toronto, Canada, October 94
- 165. Applied Mathematics Colloquium, MIT, November 94
- 166. 1994 Conference on Complexity Theory, Oberwolfach, Germany, November 1994
- 167. 35th Foundation of Computer Science Conference, Santa Fe, New Mexico, November 1995
- 168. Johan Wolfgang Goethe University, June 1995
- 169. International Logic Symposium, Haifa, Israel, August 1995

"Unstealable Electronic Passwords"

- 170. Yale University, New Haven, May 1995
- 171. Johan Wolfgang Goethe University, June 1995

"CS Checking"

- 172. Cornell University, Ithaca, New York, May 1995
- 173. Technion, Haifa, Israel, June 1995

"Interactive and Zero-Knowledge Proofs"

174. International Logic Symposium, Haifa, Israel, August 1995.

"Compact Certification of Public Keys"

175. PKI Workshop, MITRE Corp., McLean, Virginia, September 1995

"An Efficient and Secure Digital Signature Scheme"

- 176. National Institute of Standards and Technology, Gaithersburg, MD, January 1994
- 177. MIT, Cambridge, Mass, December 1995

"Provably Secure Commitment Schemes from Collision-Free Hashing"

178. Brown University, Providence, RI, April 1996

"Enhanced Certificate Revocation"

- 179. Federal PKI Meeting, Washington, DC, November 1995
- 180. Internet Privacy and Security Workshop, Haystack Observatory, Groton, MA, May 1996

- 181. ANSI Meeting, Cryptologic History Museum, Baltimore- Washington, September 96
- 182. RSA97 Conference, San Francisco, CA, January 1997
- 183. LIPARI 2000, Lipari, Italy, July 2000

"Certified E-Mail with Invisible Post Offices"

184. RSA97 Conference, San Francisco, CA, January 1997

"Complexity Preserving Checkers"

185. M. Rabin's Symposium, Jerusalem, Israel, June 1997

"Simultaneous Electronic Transactions with "Hand-Off" Trusted Parties"

186. Laboratory for Computer Science, MIT, March 1998

"Computationally-Sound Checkers for NP-Complete Problems"

- 187. Laboratory for Computer Science, MIT, April 1998
- 188. International Conference in Theoretical Computer Science in Honor of M. Blum, Hong Kong, April 1998
- 189. Workshop on Interactive Proofs:, PCP, and Fundamentals of Cryptography, Toronto, May 1998
- 190. Mathematical Foundations of Computer Science 98, Prague, August 1998
- 191. Laboratory for Information Decision Systems, MIT, October 1998

"A Stronger Definition of Proofs of Knowledge"

192. Workshop On Multi-Party Secure Computation, Weizmann Institute, Israel, June 1998

"The Notion of Secure Function Evaluation"

193. Workshop On Multi-Party Secure Computation, Weizmann Institute, Israel, June 1998

"Secure Protocols With Invisible trusted Parties"

- 194. Workshop On Multi-Party Secure Computation, Weizmann Institute, Israel, June 1998
- 195. Brandeis University, Waltham, MA, September 1998
- 196. Moses' Seminar, MIT, September 1998
- 197. Boston University, Boston, October 1998
- 198. Telecordia Laboratories, New Jersey, August 1999

199. Laboratory For Computer Science, MIT, October 1998

"Verifiable Random Functions"

200. Laboratory for Computer Science, MIT April 1999

"The All-Or-Nothing Nature of Secure Computation"

- 201. University of Toronto, Toronto, Canada, May 1999
- 202. University of California, Berkeley, CA, August 1999
- 203. Carnegie Mellon University, Pittsburgh, PA, February 2000

"Efficient ID and Signature Scheme based on Factoring"

204. PKI Standard Committee, Santa. Barbara, CA, August 1999

"Certified E-Mail with Invisible Post Offices"

- 205. Carnegie Mellon University, Pittsburgh, PA, February 2000
- 206. Industrial Liaison Program, FIB'V Workshop, MIT, May 2000

"Resettable Zero Knowledge"

- 207. The Fields Institute of Mathematical Sciences, Toronto, Canada, April 2000
- 208. 32nd Ann. Symposium On Theory of Computing, Portland, Oregon, May 2000

"Cryptographic Algorithms in The real World"

209. Carnegie Mellon University, Pittsburgh, Pennsylvania, May 2000

"Fair Protocols with Invisible Trusted Parties"

210. IdeaStream Conference, MIT, Cambridge, Mass, February 28, 2001

"Min Round Resettable Zero Knowledge"

211. Eurocrypt 2001, Innsbruck, Austria, May 2001

"Zero Knowledge has come of age"

212. Invited Lecture, Eurocrypt 2001, Innsbruck, Austria, May 2001

"Fair Electronic Exchange"

- 213. Distinguished Lecture, Princeton University, October 2001
- 214. Invited Lecture, PODC 2003 Conference, Needham, Mass, August 2003
- 215. SUN Computers, Burlington, Mass, July 2003
- 216. Distinguished Lecture, Georgia Tech, Atlanta, GA, October 2003
- 217. Technion, Haifa, Israel, November 2003
- 218. University of California Los Angeles, February 2004
- 219. RSA 2004 Conference, San Francisco, CA, February 2004
- 220. Venture One Exchange, Boston, MA, October 2004
- 221. City University of Hong Kong, Hong Kong, China, December 2004
- 222. University of Pennsylvania, PA, October 2005
- 223. University of California, Davis, May 2007
- 224. Boston University, May 2007
- 225. CIPS 2008, MIT, May 2008

"Zero-Knowledge Sets"

- 226. MIT's Laboratory for Computer Science, Cambridge, Mass, October 2003
- 227. University of Toronto, Toronto, Ontario, Canada, October 2003
- 228. Boston University, Boston, Mass, November 2003
- 229. Technion, Haifa, Israel, November 2003
- 230. Princeton's University, Princeton, NJ, December 2003
- 231. New York University, March 2004
- 232. IBM, Armonk, NY, March 2004

"Peppercoin Micropayments"

- 233. MIT's Technology Breakfast Series, MIT, December 2003
- 234. City University of Hong Kong, Hong Kong, China, December 2004

 "Physically observable Cryptography"
- 235. Laboratory for Computer Science, MIT, Fall 2003

- 236. SUN Microsystems, Burlington, MA, January 2004
- 237. Theory of Cryptography Conference, February 2004

"Collusion-Free Protocols"

- 238. DIMACS Workshop on Formal Protocols, Rutgers U., NJ, June 2004
- 239. Princeton University, Princeton, NJ, June 2004
- 240. University of Toronto, Toronto, Canada, September 2004
- 241. Carnegie-Mellon University, Pittsburgh, September 2004
- 242. University of California, Berkeley, CA, November 2004
- 243. Theory Day, Courant Institute, New York University, NY, November 2004
- 244. Brown University, Providence, RI, April 2005
- 245. Cornell University, Ithaca, NY, April 2005
- 246. University of Pennsylvania, PA, October 2005

"How To Reach Correlated Equilibrium"

- 247. University of California, San Diego, CA, November 2004
- 248. Stanford University, Palo Alto, CA, November 2004
- 249. Computer Science and Artificial Intelligence Laboratory, MIT, December 2004

"Rational Secure Computation and Ideal Mechanism Design"

- 250. Computer Science and Artificial Intelligence Laboratory, MIT, May 2005
- 251. Hebrew University, Jerusalem, Israel, May 2005
- 252. University of Haifa, Haifa, Israel, May 2005
- 253. Conference on Computation and Game Theory, Stony brook, NY, July 2005
- 254. University of California, Berkeley, CA, September 2005
- 255. Stanford University, Palo Alto, CA, September 2005
- 256. University of Pennsylvania, PA, October 2005
- 257. Boston University, MA, November 2005
- 258. Institute for Advanced Studies, Princeton, NJ, November 2005
- 259. Columbia University, New York, NY, November 2005

- 260. University of Chicago, March 2006
- 261. Carnegie Mellon University, April 2006
- 262. Brown University, October 2006

"Transparent Computing and Correlated Equilibrium"

- 263. Microsoft Research, Redmond, Washington, October 2006
- 264. New York University, November 2006
- 265. Institute for Advanced Studies, Princeton, NJ, November 2006
- 266. Weizmann Institute of Science, Rehovot, Israel, January 2007
- 267. Hebrew University, Jerusalem, Israel, January 2007
- 268. North Eastern University, Boston, January 2007

"From Weakness to Strength"

269. Workshop on Creativity, MIT, November 2006

"Collusion-Resilient Revenue in Combinatorial Auctions"

270. Ehud Kalai Conference, Hebrew University, Israel, December 2007

"Verifiably Secure Devices"

271. Theory of Cryptography Conference, NYU, New York, February 2008

"Cryptographic Game Theory"

272. Special Panel Presentation, TCC 2008, NYU, New York, February 2008

"Resilient Mechanism Design"

- 273. Frontiers in Game Theory and Networked Controlled Systems, MIT, October 2008
- 274. First China Symposium in Theoretical Computer Science, Beijing, October 2008
- 275. University of Toronto, Ontario, Canada, October 2008
- 276. University of Tel Aviv, November 2008
- 277. Hebrew University, Jerusalem, November 2008
- 278. Microsoft New England, Cambridge, December 2008

- 279. Google, New York, January 2009
- 280. Institute for Advanced Studies, Princeton, January 2009

"Truly Rational Secret Sharing"

281. Theory of Cryptography Conference, San Francisco, California, March 2009

"A New Approach to Auctions and Mechanism Design"

- 282. Cornell University, Ithaca, NY, January 2009
- 283. University of Illinois, Urbana Champaign, March 2009
- 284. Northwestern University, Chicago, March 2009
- 285. Computer Science Department, UC Berkeley, Berkeley, California, March 2009
- 286. Science and Artificial Intelligence Laboratory, MIT, May 2009
- 287. Microsoft Research, Mountain View, California, June 2009
- 288. North American Summer Meeting of the Econometric Society, Boston University, June 2009
- 289. Department of Economics, Boston University, Boston, September 2009
- 290. Department of Economics, MIT, Cambridge, Mass, September 2009
- 291. China 2020 Vision Conference, Tsinghua University, Beijing, China, October 2009
- 292. School of Information and Communication, École Polytechnique Federal de Lausanne, April 2010

"Theory, Practice, and Fair Electronic Exchange"

293. Drexler University, Philadelphia, April 2010

"Perfect Revenue From Perfectly Informed Players"

- 294. Stanford University, Economics Department, May 2010
- 295. Weizman Institute, Rehovot, Israel, June 2010

"Perfect Implementation of Arbitrary Mechanisms"

- 296. Behavioral and Quantitative Game Theory, May 2010 Newport Beach, California USA
- 297. Decentralized Mechanism Design, Distributed Computing, and Cryptography Workshop, Princeton 2010

298. Workshop On Solution Concepts For Extensive Games, Aarhus, Denmark, June 2010

"The Conservative Model of Incomplete Information and The Second-Knowledge Mechanism"

299. 2nd Brazilian Workshop on Game Theory, July 2010, Sao Paulo, Brazil

"25 Years of Zero Knowledge"

300. CRYPTO 2010, Santa Barbara, California, August 2010

"New Mechanisms For a New World"

301. University of Pennsylvania, Philadelphia, Pennsylvania, September 2010

"Resilient and Budget-Balanced Maximization of Social Welfare in Complete-Information Markets"

302. Tsinghua University, Beijing, China, January 2011

"Collusive Dominant-Strategy Truthfulness"

303. Innovation in Algorithmic Game Theory, Jerusalem, Israel, May 2011

"The Second-Knowledge Mechanism"

- 304. Cornell University, Ithaca, New York, September 2010
- 305. Microsoft New England, October 2010
- 306. Stanford University, November 2010
- 307. Tsinghua University, Beijing, China, January 2011
- 308. MIT, Theory of Computation Colloquium, February 2011
- 309. Columbia/NYU/IBM Theory Day, New York, NY, May 2011
- 310. Center for Rationality, Jerusalem, Israel, May 2011
- 311. Carnegie Mellon University, November 2011

"Virtually Trusted Electronic Communications and Transactions"

312. Citi-MIT Meeting, New York, June 2012

"Resilient Combinatorial Auctions"

313. Finance Made Difficult, MIT, June 2012

"Knightian Auctions"

- 314. Theory of Computation Colloqium, MIT, February 2012
- 315. Cornell University, March 2012
- 316. SIAM Conference, Halifax, Canada, June 2012
- 317. Theoretical Computer Science Workshop, City University, Hong Kong, July 2012
- 318. Harvard University, October 2012
- 319. New Economic School, Moscow, November 2012
- 320. Carnegie Mellon University, November 2012

"Perfect Pseudo Randomness"

321. Turing 100, Boston University, November 2012

"Universal Payment Systems"

322. Yandex, Moscow, November 2012

"Rational Proofs"

- 323. Newton Institute, Cambridge, England, April 2012
- 324. MIT, May 2012
- 325. Cambridge Area Economics and Computer Science Conference, Cambridge, MA April 2013
- 326. Hidelberg Laureate Forum, Hidelberg, Germany, September 2013.
- 327. Pneueli Lecture, Weizman Institute, Rehovot, Israel, December 2013
- 328. University of Venice, Venice, Italy, December 2013

"Fair Electronic Exchange"

329. MIT, World Federation of Exchnages Forum, December, 2013

"Proofs, Secrets, and Computation"

- 330. Lectio Magistralis, La Sapienza University, Rome, Italy, May 2013
- 331. University of Washington, Seattle, Distinguished Lecture, November 2013
- 332. WPI, Worcester, Distinguished Lecture, November 2013

- 333. MIT, CSAIL, Dertouzos Lecture, December 2013
- 334. Weizman Institute, Rehovot, Israel
- 335. Lectio Magistralis, Politecnico di Milano, Milan, Italy, December 2013
- 336. Lectio Magistralis, Universita' di Venezia, Venice, Italy, December 2013
- 337. Lectio Magistralis, Universita' di Palermo, Palermo, Italy, December 2013
- 338. Stony Brook University, University Distinguished Lectures in Science and Engineering, February 2014
- 339. Florida International University, Distinguished Lecture, October 2014
- 340. Russian-American Research Symposium, Moscow, Russia, December 2014
- 341. Global Lecture, Zhejiang University, Hangzhou, China, December 2014
- 342. Keynote Lecture, Techfest 2015, Indian Institute of Technology, Mumbay, India, Jan 2015
- 343. Infosys, Bangalore, India, Jan 2015
- 344. Lectio Magistralis, University of Salerno, Salerno, Italy, May 2015
- 345. Lectio Magistralis, University of Padova, Padova, Italy, May 2015
- 346. Distinguished Lecture, Pierre and Marie Curie University, Paris, France, May 2015
- 347. Science and Innovation Forum, Fudan University, Shanghai, Dec 2015

"Towards Resilient Mechanism Design"

- 348. Intel, November 2013
- 349. Theory of Cryptography Conference, Invited Lecture, San Diego, CA, February 2014
- 350. Distinguished Lecture, Indian Institute of Science, Bangalore, India, Jan 2015
- 351. French Symposium on Games 2015, Diderot University, Paris, France, May 2015

"Proofs (according to Silvio)"

352. Turing Lecture, STOC, New York, June 2014

"Knightian Analysis of the VCG Mechanism"

353. Invited Lecture, Games and Decision, Pisa, Italy, July 2014

"Rational Resilient Protocols"

354. Invited Lecture, PODC, Paris, July 2014

"The Mathematics of Secure Interaction"

355. Distinguished Lecture, Beijing University, Beijing, China, May 2015

"New Electronic Infrastructures"

356. Zhongzhi Enterprise Group, Beijing, China, May 2015

"Universal Micro Payments"

357. Zhongzhi Enterprise Group, Beijing, China, May 2015

"Prove, Segreti e Computazione"

358. Lectio Magistralis, Università di Genova, November 2016

"Evoluzione del Concetto di Prova"

359. Festival Della Scienza, Genova, November 2016

"Algorand: The True Public Ledger"

- 360. IDSS Workshop on Data Analytics and Risk, MIT, April 2016
- 361. A Celebration of Mathematics and Computer Science, Institute of Advanced Studies, Princeton, October 2016
- 362. Symposium on Interdisciplinary Information Sciences, Tsinghua University, Beijing, December 2016

"Byzantine Agreement, Made Trivial"

363. Innovations in Theoretical Computer Science, UC Berkeley, January 2017

Patents

PSEUDO- RANDOM GENERATION

1. U.S. Patent No. 4,944,009: Pseudo-Random Sequence Generator

ID SCHEMES

- 2. U.S. Patent No. 4,879,747: Method and System for Personal Identification
- 3. U.S. Patent No. 4,995,081: Method and System for Personal Identification Using Proofs of Legitimacy
- 4. U.S. Patent No. 5,351,302: Method for Authenticating Objects Identified by Images or Other Identifying Information

DIGITAL SIGNATURES

- 5. U.S. Patent No. 5,016,274: On-Line/Off-Line Digital Signing
- 6. U.S. Patent No. 5,432,852: Large Provably Fast and Secure Digital Signature Schemes Based on Secure Hash Functions
- 7. U.S. Patent No. 5,537,475: Efficient Digital Signature Algorithm and Use Thereof
- 8. U.S. Patent No. 5,638,447: Compact Digital Signatures

ENCRYPTION

- 9. U.S. Patent No. 5,499,296: Natural Input Encryption and Method of Use
- 10. U.S. Patent No. 5,519,778: Method for Enabling Users of a Cryptosystem to Generate and Use a Private Pair Key for Enciphering Communications Between the Users

KEY ESCROW

- 11. U.S. Patent No. 5,276,737: Fair Cryptosystems and Method of Use
- 12. U.S. Patent No. 5,315,658: Fair Cryptosystems and Method of Use
- 13. Canadian Patent No. 2,118,493: Fair Cryptosystems and Method of Use
- 14. Israeli Patent No. 105,471: Fair Cryptosystems and Method of Use
- 15. EPO Patent No. 0637413: Verifying Secret Keys in a Public-Key Cryptosystem
- 16. Australian Patent No. 670,587: Verifying Secret Keys in a Public-Key Cryptosystem
- 17. Korean Patent No. 151217: Fair Cryptosystems and Method of Use
- 18. British Patent No. 0637413: Fair Cryptosystems and Methods of Use
- 19. British Patent No. 0695485: Fair Cryptosystems and Methods of Use Thereof
- 20. U.S. Patent No. 5,666,414: Guaranteed Partial Key Escrow
- 21. U.S. Patent No. 6,026,163: Distributed Split-Key Cryptosystem and Applications

DIGITAL CERTIFICATION AND CERTIFICATE VALIDATION

- 22. U.S. Patent No. 5,420,927: Method for Certifying Public Keys in a Digital Signature Scheme
- 23. U.S. Patent No. 5,604,804: Improved Method for Certifying Public Keys in a Digital Signature Scheme
- 24. U.S. Patent No. 5,717,759: Improved Method for Certifying Public Keys in a Digital Signature Scheme
- 25. U.S. Patent No. 5,610,982: Compact Certification with Threshold Signatures

- 26. U.S. Patent No. 5,666,416: Certificate Revocation System
- 27. U.S. Patent No. 5,793,868: Certificate Revocation System
- 28. U.S. Patent No. 5,717,758: Witness-Based Certificate Revocation System
- 29. U.S. Patent No. 5,960,083: Certificate Revocation System
- 30. U.S. Patent No. 5,717,757: Certificate Issue Lists
- 31. U.S. Patent No. 6,097,811: Tree-Based Certificate Revocation System
- 32. U.S. Patent No. 6,292,893 B1: Certificate Revocation System
- 33. U.S. Patent No. 6,301,659 B1: Tree-Based Certificate Revocation System
- 34. European Patent No. EP 0 858 702 B1: Tree-Based Certificate Revocation System
- 35. U.S. Patent No. 6,487,658: Efficient Certificate Revocation
- 36. U.S. Patent No. 6,766, 450: Efficient Certificate Revocation

SIMULTANEOUS ELECTRONIC TRANSACTIONS

- 37. U.S. Patent No. 5,666,420: Simultaneous Electronic Transactions
- 38. U.S. Patent No. 6,134,326: Simultaneous Electronic Transactions
- 39. Canadian Patent No. 2,215,908: Simultaneous Electronic Transactions
- 40. EPO Patent No. 96910516.2: Simultaneous Electronic Transactions; Nationalized in Italy and the United Kingdom
- 41. U.S. Patent No. 5,553,145: Simultaneous Electronic Transactions with Visible Trusted Parties
- 42. U.S. Patent No. 5,629,982: Simultaneous Electronic Transactions with Visible Trusted Parties
- 43. U.S. Patent No. 6,137,884: Simultaneous Electronic Transactions with Visible Trusted Parties
- 44. U.S. Patent No. 6,141,750: Simultaneous Electronic Transactions with Subscriber Verification

IDEAL ELECTRONIC TRANSACTIONS

45. U.S. Patent No. 5,615,269: Ideal Electronic Negotiations

ANONYMOUS TRANSACTIONS

- 46. U.S. Patent No. 5,790,524: Anonymous Information Retrieval System
- 47. U.S. Patent No. 5,812,670: Traceable Anonymous Transaction

Technology Transfer

- US Government (Fair Cryptosystems)
 Bankers Trust (Fair Cryptosystems)
- 3. Bankers Trust (Simultaneous Electronic Transactions)

.COMPANIES

1. CoreStreet (acquired by ActiveIDentity, 2009)

Founder and Inventor of the Core Technologies

• Core Business: Real Time Credentials

2. *Peppercoin* (acquired by Chockstone, 2007)

Co-Founder and Co-Inventor of the Core Technologies • Role:

• Core Business: Micropayments