

CURRICULUM VITAE

Edoardo PERSICHETTI

Address : Department of Mathematical Sciences, Florida Atlantic University,
777 Glades Road, Boca Raton, FL 33431, USA.

e-mail : epersichetti@fau.edu

web : <http://persichetti.webs.com>

07 November 1984 in Rome, Italy

Academic Career

- Jan 2014 - present Assistant Professor.
 Florida Atlantic University, USA
- Aug 2014 - Dec 2016 Assistant Professor.
 Dakota State University, USA
- Dec 2012 - Jul 2014 Adiunkt Naukowy (Assistant Professor).
 University of Warsaw, Poland

Education

- Nov 2009 - Sep 2012 PhD in Mathematics.
 Supervisor : Steven Galbraith.
 University of Auckland, New Zealand
- Nov 2005 - Sep 2007 Master of Science in Mathematics.
 Supervisor : M. J. de Resmini.
 Università degli Studi "La Sapienza", Rome, Italy
- Oct 2002 - Nov 2005 Bachelor of Science in Mathematics.
 Supervisor : Claudio Bernardi.
 Università degli Studi "La Sapienza", Rome, Italy

Research Interests

Public-Key Cryptography, Provable Security, Coding Theory, Number Theory.

Published papers

- Efficient Implementation of Hybrid Encryption from Coding theory¹.
C2SI Carlet 2017
- On lower bounds for Information Set Decoding over \mathbb{F}_q and on the effect of Partial Knowledge².
International Journal of Information and Coding Theory
- Leakage-Resilient Cryptography over Large Finite Fields : Theory and Practice³.
ACNS 2015
- Code-based public-key encryption resistant to key leakage.
MoCrySEn 2013
- Secure and Anonymous Hybrid Encryption from Coding Theory.
PQCrypto 2013
- Improving the Efficiency of Code-Based Cryptography.
PhD thesis, University of Auckland 2012
- Efficient implementation of a CCA2-secure variant of McEliece using generalized Srivastava codes⁴.
PKC 2012
- Compact McEliece keys based on Quasi-Dyadic Srivastava codes.
Journal of Mathematical Cryptology

1. with Pierre-Louis Cayrel, Cheikh T. Gueye, Modou Mboup and Ousmane Ndiaye.

2. with Robert Niebuhr, Pierre-Louis Cayrel and Stanislav Bulygin.

3. with Marcin Andrychowicz and Daniel Masny.

4. with Pierre-Louis Cayrel and Gerhard Hoffmann.

Submitted Papers

- An Improvement of Information-Set Decoding for Codes with a Non-trivial Automorphism Group⁵.
- Homomorphic Obfuscation⁶.

Preprints

- On a CCA2-secure variant of McEliece in the standard model.
<http://eprint.iacr.org/2012/268>.

Honors and Awards

- December 2011 Aitken Prize for Best Contributed Talk by a student.
NZMS Colloquium 2011
- November 2011 “People’s Choice” award for Best Talk.
NZMASP 2011
- September 2011 High Distinction award.
Faculty of Science Postgraduate Poster Competition 2011
- November 2010 Best Pure Mathematics Talk award.
NZMASP 2010
- September 2010 Certificate of Merit.
Faculty of Science Postgraduate Poster Competition 2010

Selected Talks given at Conferences and Workshops

- July 2016 DIMACS Workshop on Cryptography and its Interactions.
Rutgers University, New Jersey, USA
- June 2015 ACNS 2015.
Columbia University, New York, USA
- September 2013 MoCrySEn 2013.
Regensburg, Germany
- June 2013 CBC - Code Based Cryptography Workshop.
INRIA, Rocquencourt, France
- June 2013 PQCrypto 2013.
Limoges, France
- May 2012 PKC 2012.
Darmstadt, Germany
- May 2012 CBC - Code Based Cryptography Workshop.
DTU, Copenhagen, Denmark
- December 2011 NZMS Colloquium.
University of Auckland, New Zealand
- October 2011 SP-ASCrypto, the São Paulo Advanced School of Cryptography.
Atibaia, SP, Brasil
- November 2010 NZMASP 2010 - New Zealand Mathematics and Statistics Postgraduate conference.
University of Canterbury, Christchurch, New Zealand

Organized Conferences and Events

NZMASP 2012 - New Zealand Mathematics and Statistics Postgraduate conference.
University of Auckland, New Zealand

12-16 November, 2012.

5. with Pierre-Louis Cayrel, Cheikt Gueye and Jean Belo Klamti.

6. with Vincenzo Iovino and Francesco Rossi.

Teaching Experience

Florida Atlantic University

- MAC 2312 (Calculus II).
Spring 2017

Dakota State University

- MATH 102 (College Algebra).
Fall 2014
- MATH 120 (Trigonometry).
Spring 2015
- MATH 201 (Introduction to Discrete Mathematics).
Fall 2014 and 2015, Spring 2015 and 2016, Summer 2015 and 2016 (face to face and online)
- MATH 204 (Mathematics for Cyber Operations).
Spring 2016
- MATH 316 (Discrete Mathematics).
Fall 2014, Spring 2015 and 2016
- MATH 318 (Advanced Discrete Mathematics).
Spring 2016

University of Warsaw

- Public-Key Cryptography : a Mathematical Insight (Graduate course).
Semester 2, AY 2013-2014

University of Auckland

- Superstart intensive course.
Academic Years 2010, 2011 and 2012
- MATHS 108 (General Mathematics 1).
Semester 1 and 2, 2011, Semester 1, 2012
- MATHS 208 (General Mathematics 2).
Semester 2, 2012 and Summer School Term, 2012
- COMPSCI 225 (Discrete Structures in Mathematics and Computer Science).
Semester 2, 2010 and Semester 1, 2012
- MATHS 253 (Advancing Mathematics 3).
Semester 1, 2011
- MATHS 255 (Principles of Mathematics).
Semester 2, 2011
- MATHS 315 (Mathematical Logic).
Semester 2, 2012
- MATHS 328 (Algebra and Applications).
Semester 1, 2012
- MATHS 714 (Number Theory).
Semester 2, 2010 and Semester 2, 2011

Committee Work

- Assessment Coordinating Committee, Curriculum Committee, Diversity Committee, Code of Conduct Board, Cyber Operations Faculty Search.
Ongoing
- Mathematics Faculty Search.
Spring 2015, Summer 2016

Invitations and Visits

July 2017	Invited talk at SIAM Conference on Applied Algebraic Geometry (AG17).
June 2016	Invited by Nigel Boston at UW - Madison (USA) for a workshop on Cybersecurity.
March 2016	Invited by Elisa Gorla at Université de Neuchâtel (CH) for a talk on Code-Based Cryptography.
January 2014	Visited Jonathan Katz at University of Maryland (USA) to give a talk about my work on Leakage-Resilient LPN-based Authentication Schemes.
October 2013	Visited Eike Kiltz at Ruhr-Universität Bochum (Germany) for a research project on leakage-resilient authentication schemes.
April 2011	Visited Pierre-Louis Cayrel at CASED, Center for Advanced Security Darmstadt (Germany) to present my paper “Compact McEliece keys based on Quasi-Dyadic Srivastava codes”.

Grants

January 2016	College Research Award, Faculty of Arts and Sciences. <i>1000 US\$</i>
June 2012	Travel Grant, New Zealand Mathematical Society (NZMS). <i>800 NZ\$</i>
May 2012	Travel Grant, European Network of Excellence in Cryptology II (ECRYPT-II). <i>Full cost of travel and accommodation at the CBC - Code Based Workshop in Copenhagen</i>
April 2012	Performance-Based Research Fund (PBRF). <i>1500 NZ\$</i>
October 2011	Travel Grant, University of Campinas/University of São Paulo. <i>Full cost of travel and accommodation at the São Paulo Advanced School of Cryptography</i>
May 2011	PostGraduate Student Association (PGSA) Travel Grant. <i>500 NZ\$</i>
March 2011	Performance-Based Research Fund (PBRF). <i>1500 NZ\$</i>

Refereeing

- WCS 2017, ISIT 2014, ISC 2013, ACISP 2013, Eurocrypt 2010, 2012, 2013, 2014, Crypto 2011, 2013, Asiacrypt 2012, 2014, PQCrypto 2011, 2016, SAC 2011
- Design, Codes and Cryptography, Journal of Algebra Combinatorics Discrete Structures and Applications
- IACR book reviews (several books)

Other Professional Experiences and Skills

Present	Editor of the IACR book review system. <i>Since January 2014</i>
Aug 2012, 2011, 2010	Organization of Courses and Careers Day (Mathematics Department). <i>University of Auckland, New Zealand</i>
December 2011	Helped organizing NZMS Colloquium 2011. <i>University of Auckland, New Zealand</i>
Jan - Aug 2005	Erasmus project for study abroad. <i>Universidade de Lisboa, Lisbon, Portugal</i>

Languages spoken

Italian (Mother Tongue), English, Portuguese (Fluent), Spanish (Good).

Professional society memberships

AMS, NZMS, IACR.