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Vitae

Personal information

Date of Birth 25.03.1980

Place of Birth Sorengo, Switzerland Citizenships Swiss and Italian

Education

2006-curr.: Ph.D. Student in Mathematics, Zurich University

• Expected defense: Summer 2011

· Subject: Algebraic methods in Random Linear Network Coding,

Advisor: Prof. J. Rosenthal

1999-2005: M.S. (Laurea) in Mathematics, University of Pisa, Italy

• GPA: 106 out of 110, among the best 10%

• MA thesis : Calcolo della distribuzione dei pesi nei codici ciclici accorciati,

Advisor: Prof. P. Gianni

1995-1999 : High school certificate: Type C (Sciences),

Liceo Cantonale di Mendrisio, Switzerland

Work Experience

RESEARCH FELLOW, MATHEMATICS INSTITUTE, ZURICH UNIVERSITY, 2006-CURRENT

- · Independent and joint research at the intersection of Mathematics, Computer Science and Electrical Engineering
- Publication of research results in various international journals (AAECC Springer Verlag, Proc. of ISIT 2008, etc)*
- Different research talks in international conferences (ISIT 2008 Toronto, AMS Joint Mathematics Meetings 2009 Washington, ITW 2010 Dublin, etc)*
- · Teaching undergraduate students / Leading seminars in Computer Algebra
- Involved in the writing of the Swiss National Foundation research grant no. 126948

TUTOR ASSISTANT, MATHEMATICS INSTITUTE, UNIVERSITY OF PISA, 2003-2005

· Tutoring first year undergraduate students and advertising the Master in Mathematics to High school students

Extracurricular activities

2010 Expert in Cryptography for the Schweizer Jugend Forscht

• 2010 Representative of the assistants in the committee for the selection of a Professor at the University

of Zurich

2008-current
 Elected member of the Cryptology Detachment of the Swiss Armed Forces

• 2003-2005 Representative of the students in the Council of the Mathematics Institute at the University of Pisa

• 2001-2009 Part-time job in the directorate of a three stars Hotel in Mendrisio

Miscellaneous

Language Skills
 Fluent: Italian, English / Proficient: German, French / Basic: Spanish

• Computer Skills Advanced proficiency with all main operative systems: **Mac OS**, **Unix based OS** (Linux and

SunOS) and Windows / Implementation Languages: C++, JAVA and Python / Mathematics Programs: Maple, Matlab, Mathematica, Magma, Sage / Knowledge of new media, Internet

related technologies and current web trends

Sports Mountain related sports (hiking, climbing and ski touring) and interest in Martial Arts (Nanbudo

and Shitoryu)

Personal Interests
 Socializing especially in multiethnic environments, Cooking, Reading and Traveling

^{*} for a complete list visit http://user.math.uzh.ch/manganiello/felice/index_files/CV-mar11.pdf

Publications

- F. Manganiello. <u>Computation of the weight enumerator of CRC codes</u>, <u>Applicable Algebra in Engineering</u>, <u>Communication and Computing</u>. 19(4):349-363, August 2008
- F. Manganiello, E. Gorla, J. Rosenthal. <u>Spread codes and spread decoding in network coding</u>, In *Proceedings of the 2008 IEEE International Symposium on Information Theory*, pages 851–855, Toronto, Canada, 2008.
- A.-L. Trautmann, F. Manganiello, and J. Rosenthal. <u>Orbit codes a new concept in the area of network coding</u>. In *Proceedings of the 2010 IEEE Information Theory Workshop*, Dublin, Ireland, 2010.
- F. Manganiello, A.-L. Trautmann, and J. Rosenthal. On conjugacy classes of subgroups of the general linear group and cyclic orbit codes. to appear in *Proceeding of the 2011 IEEE International Symposium on Information Theory*, St. Petersburg, Russia.
- F. Manganiello, E. Gorla, J. Rosenthal, An algebraic approach for decoding spread codes, in preparation.
- F. Manganiello, <u>Spread Codes and more general network codes</u>, Ph.D. dissertation, in preparation.