# FERDINANDO CICALESE

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## **EDUCATION**

PhD in Computer Science, University of Salerno, 2001

Laurea degree in Informatics, University of Salerno, 1995

#### **EMPLOYMENT**

**Associate Professor,** Department of Computer Science, University of Verona, Italy, from Oct. 2014

**Associate Professor,** Department of Computer Science and Appl., University of Salerno, Italy, 2006 - 2014

Research Group Leader, "Combinatorial Search Algorithms in Bioinformatics", Faculty of Technology, Bielefeld University, Germany, 2004 - 2009

**Assistant Professor,** Department of Computer Science and Appl., University of Salerno, Italy, 2001 - 2006

#### AWARDS

Sofja Kovalevskaja Award, Alexander von Humboldt Foundation and the German Federal Ministry of Education and Research, 2004

Best Italian PhD Thesis in Theor. Comp. Science, Italian Chapter of the EATCS, 2001

#### **FUND-RAISING**

**Sofja Kovalevskaja Award**, grant size **700 000 Euro**, Alexander von Humboldt Foundation and German Federal Ministry of Education and Research, 2004 - 2009 (Principal Investigator)

**DFG Research Grant,** Advances in Search and Sorting, grant size: **120 000 Euro**, Deutsche Forschungsgemeinschaft, 2007 - 2010 (cooperation partner)

**ZiF Cooperation Group Programme,** grant size: **50 000 Euro**, Center for Interdisciplinary Research (ZiF), Bielefeld, 2010 - 2013 (Principal Investigator)

### FELLOWSHIPS AND HONORS

**DAAD fellowship**, Visiting researcher at Department of Computer Science, Freie Universität Berlin, Germany, 2 months, 2011

Marie Curie fellowship, Visiting professor at Alfréd Rényi Institute of Mathematics, Hungarian Academy of Sciences, Budapest, Hungary, 6 months, EU-FP6 ToK HUBI, 2009 - 2010

Marie Curie fellowship, EU Research Training Network *COMBSTRU: Combinatorial Structure of Intractable Problems*, 2 year contract interrupted for taking up the research group leadership in Bielefeld, 2004

**DAAD fellowship**, Visiting researcher at Center for Biotechnology, Bielefeld University, Germany, 6 weeks, 2004

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**ZiF** fellowship, Visiting researcher at the Bielefeld Center for Interdisciplinary Research (ZiF), within the Research Group General Theory of Information Transfer and Combinatorics, 2002 - 2003

**COST Action fellowship**, Visiting researcher at Faculty of Informatics, Vienna University of Technology, 6 weeks, 2000

**CNR fellowship**, Italian Council of Research fellowship for a research visit to Middlesex University, London, UK, 8 months, 1995 - 1996

Erasmus fellowship, Middlesex University, London, UK, 3 months, 1993

#### PROGRAMME COMMITTEE MEMBERSHIPS IN INTERNATIONAL SYMPOSIA

CPM 2015, 26<sup>th</sup> Annual Symp. on Combinatorial Pattern Matching, Ischia, Italy, 2015 (co-chair)

SPIRE 2014, 21st Intl. Symp. on String Processing and Inf. Retrieval, Ouro Preto, Brazil, 2014

ICTCS 2014, 15<sup>th</sup> Italian Conf. on Theoretical Computer Science, Perugia, Italy, 2014

FCT 2013, 19<sup>th</sup> Intl. Symp. on Fundamentals of Computation Theory, Liverpool, UK, 2013

Search Methodologies III, Center for Interdisciplinary Res. Bielefeld, Germany, 2012 (co-chair)

CPM 2012, 23<sup>rd</sup> Annual Symp. on Combinatorial Pattern Matching, Helsinki, Finland, 2012

 ${f SOFSEM~2012},~38^{th}$  Intl. Conf. on Current Trends in Theory and Practice of Computer Science, Špindlerův Mlýn, Czech Republic, 2012

ICALP2011GT, Algorithms and data structures for selection, identification and encoding, ICALP 2011 Workshop, Zurich, Switzerland, 2011 (co-chair)

CCP 2011, Intl. Conf. on Data Compression, Communication, and Processing, Palinuro, Italy, 2011

Search Methodologies II, Center for Interdisciplinary Res. Bielefeld, Germany, 2010 (co-chair)

Search Methodologies, Leibniz-Zentrum für Informatik, Dagstuhl, Germany, 2009 (co-chair)

LATIN 2008, Latin American Theoretical Informatics Symposium, Buzios, Brazil, 2008

CASB 2006, Intl. Conf. on Computational and Systems Biology, Dallas, USA 13-14 Nov. 2006

COSSAC 2001, Combinatorics of Searching, Sorting & Coding, Ischia, Italy, 2001 (co-chair)

SMI '96, Intelligent Multimedia Systems, Ravello, Italy, 13-15 Nov. 1996

#### EDITORIAL ACTIVITY

Algorithmica, special issue on Group Testing and Compressed Sensing, vol. 67 (3), 2013

Theoretical Computer Science, special issue dedicated to Search Methodologies, in preparation

Lecture Notes in Computer Science Festschrift, Information Theory, Combinatorics and Search Theory, vol. 7777, 2013

**Discrete Applied Mathematics**, special issue on *Combinatorics of Searching*, *Sorting*, and *Coding*, vol. 137 (1), 2004

### OTHER SCIENTIFIC RESPONSIBILITIES

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Scientific Coordinator of the Salerno Unit of Infolife - Laboratorio Nazionale CINI per la Bioinformatica

External referee for: US National Science Foundation (NSF), US National Security Agency (NSA), United States-Israel Binational Science Foundation (BSF), Italian Ministry for Education, University, and Research (MIUR)

Referee for international journals: ACM Transactions on Algorithms, Algorithmica, Central European Journal of Mathematics, Computers and Operations Research, Discrete Applied Mathematics, IEEE/ACM Transactions on Computational Biology and Bioinformatics, IEEE Transactions on Industrial Applications, IEEE Transactions on Information Theory, Information Processing Letters, Journal of Combinatorial Theory, Journal of Discrete Algorithms, SIAM Journal on Computing, Soft Computing, Theoretical Computer Science, and others

Referee for international conferences: ESA, ICALP, ICTCS, ISAAC, ISIT, LATIN, MICAI, MFCS, SIROCCO, SODA, STACS, WABI, and others

## PhD SUPERVISION, MENTORING

### PhD programme committee membership

- Computer science PhD programme, University of Salerno, Italy, 2006 present
- Bioinformatics PhD programme, programme of the University of Benevento, Italy, 2008 2009
- International Graduate School in Bioinformatics and Genome Research, Bielefeld University, Germany, 2005 - 2009

### Phd Supervisor of

- Christian Heup, thesis on *L-Identification entropy for sources*, defended (with distinction) on Dec. 11, 2006, Faculty of Mathematics, Bielefeld University
- Travis Gagie, thesis on New Algorithms and Lower Bounds for Sequential-Access Data Compression, defended (top grade) on July 27, 2009, Faculty of Technology, Bielefeld University
- José Amgarten Quitzau, thesis on Biological Applications for De Bruijn Subgraphs and Interval Group Testing, defended (top grade) on Mar. 25, 2010, Faculty of Technology, Bielefeld University

PostDoc Mentor of Hans-Michael Kaltenbach (2006), Zsuzsanna Lipták (2007-2009, now assistant professor at University of Verona, Italy), Martin Milanič (2007-2009, now assistant professor at University of Primorska, Slovenia), Julia Mixtaki-Zakotnik (2008), Yasmin Rios Solis (2007, now associate professor at Universidad Autónoma de Nuevo León, Mexico)

## LECTURING IN INT'L MASTERS AND PhD PROGRAMME

5th Emléktábla invited senior lecturer for the Alfréd Rényi Institute of Mathematics, Budapest, Hungary, 2013

**Doctoral School of Mathematics and Computer Science**, invited lecturer at the University of Primorska, Koper, Slovenia, 2012

**Bielefeld University** lecturer for the Masters and PhD courses: Advanced algorithmic techniques for Bioinformatics (AcaYr 2007/8); Elements of Combinatorics for Computer Scientists (AcaYr's 2005/6, 2006/7); Complex Interactions in Molecular Systems: A Game Theoretic Approach (AcaYr 2005/6);

Pan-European MSc Applied Informatics Programme, Middlesex University of London and University of Salerno. Lecturer of *Intelligent Tutoring Systems*, (AcaYr 1994/5)