VIA OIRORA, 6945 ORIGLIO, SWITZERLAND E-MAIL: <u>FRANCESCO.RIVA@CERN.CH</u> WWW-THPHYS.PHYSICS.OX.AC.UK/USERS/FRANCESCORIVA/ 0041 78 772 55 75

FRANCESCO RIVA

GENERAL INFORMATION

Born the 31st of July 1979, in Locarno, Switzerland; of Swiss nationality.

DEGREES

2008 - Now University of Geneva – Theoretical Physics Department

Genève, Switzerland

• Research in the group of Prof. Ruth Dürrer

2007 - 2008 CERN - European Organization for Nuclear Research

Genève, Switzerland

Marie Curie Fellow in Theoretical Physics

2004 - 2008 Merton College – University of Oxford

Oxford, England

- DPhil in Theoretical Particle Physics and Cosmology under the supervision of Prof John March-Russell and Prof Subir Sarkar: "Cosmological Consequences of Supersymmetric Flat Directions".
- Examined by Prof Graham Ross, Oxford and Prof Steve Abel, Durham
- 1998 2004 ETHZ Swiss Federal Institute of Technology

Zürich, Switzerland

- Diploma with distinction in Theoretical Physics
- 2002 2004 EPFL Ècole Polytechnique Federale de Lausanne

Lausanne, Switzerland

- Diploma work "Particle Production and Generation of Density Perturbations in the Inflating Brane Universe" under the supervision of Dr A. Neronov and Prof M. Shaposhnikov.
- 2000 2001 King's College

London, England

• 1 year Erasmus exchange program

PUBLICATIONS

- Ben Gripaios, Alex Pomarol and Francesco Riva, *Anomaly Physics at the LHC and the Next-to-Minimal Composite Higgs Model*, will appear soon in the arXiv.
- Antonio Riotto and Francesco Riva: Curvature Perturbation from Supersymmetric Flat Directions, Phys.Lett.B670: 169–173, 2008.
- Gian Giudice, Lotta Mether, Antonio Riotto, Francesco Riva: Supersymmetric Leptogenesis and the Gravitino Bound, Phys.Lett.B664: 21-24, 2008.
- Francesco Riva, Flat Directions in the Early Universe: Birth, Life and Death, Proceedings of Science, POS(Cargese)017, 2007.
- Anders Basboll, David Maybury, Francesco Riva, Stephen West: Non-Perturbative Flat Direction Decay, Phys.Rev.D76:065005, 2007.
- John March-Russell, Francesco Riva: Signals of inflation in a Friendly String Landscape, JHEP 0607:033, 2006

3.12.2008 CERN – COSMO Coffee • Scheduled talk on "SUSY Leptogenesis and the Gravitino Bound"	Oxford, England			
25.09.2007 UniverseNET conference • Talk on "Curvature Perturbations from Supersymmetric Flat Directions"	Oxford, England			
 19.9.2008 University of Geneva Talk on "Leptogenesis and Curvature Perturbations in Supersymmetry" 	Genève, Switzerland			
22.05.2008 Planck08 • Talk on "Supersymmetric Leptogenesis and the Gravitino Bound"	Barcellona, Spain			
17.10.2007 CERN - COSMO Coffee • Talk on "Flat Direction in the Early Universe: Birth, Life and Death"	Genève, Switzerland			
9.08.2007 Cargèse Summer Institute – Student Sessions • Talk on "Flat Direction in the Early Universe: Birth, Life and Death"	Cargèse, France			
17.05.2007 University of Oxford - Theoretical Physics Seminar • Talk on "Non-Perturbative Flat Direction Decay"	Oxford, England			
27.10.2006 University of Oxford - Students Theory Seminar Series • Talk on "From Inflation to Us with a little help from Preheating"	Oxford, England			
27.4.2006 University of Oxford - Theoretical Physics Seminar • Talk on "Signals of Inflation in the Friendly String Landscape"	Oxford, England			
 19.5.2005 University of Oxford - Phenomenology Group Seminars Talk on "Flux Compactifications and the Stabilization of Moduli" 	Oxford, England			
Awards and Competitions				
2007 Swiss National Fund • Awarded the "Chercheur Debutant" Fellowship - Declined	Switzerland			
2004 Merton College, University of Oxford • Awarded the Greendale Scholarship	Oxford, England			
 2003 ETHZ – Swiss Federal Institute of Technology Awarded the Polya Funds Prize from the Department of Mathematics for a distribution of Mathematics and Physics 	Zürich, Switzerland distinct Diploma in			
2003 ETHZ – Swiss Federal Institute of Technology • Awarded the Stefano Franscini Scholarship	Zürich, Switzerland			
1998 - 2003 ETHZ – Swiss Federal Institute of Technology	Zürich, Switzerland			
• Awarded yearly the Margherite Lang Scholarship and the Achille Isella Bursary				
1998, July 29th International Physics Olympics • I took part in the 19th International Physics Olympics as one of the five members of the	Reykjavik, Iceland he Swiss team.			

CONFERENCE ATTENDANCE

9	.2008	UniverseNet 08	Oxford, England
5	2008	Planck 08 – The Quest for Unification: Theory	Barcelona, Spain
4	2008	PONT d'Avignon	Avignon, France
8	2007	Cargese Summer Institute	Cargèse, France
5	2006	Planck 06 – The Quest for Unification: Theory Confronts Experiment	Paris, France
9	.2005	Corfu05 - Corfu Summer Institute on Elementary Particle Physics	Corfu, Greece

OTHER WORK EXPERIENCE

2006 - 2007 University of Oxford

Oxford, England

• Private tuitions in Physics and Mathematics for first year students at San Peter's College.

2002, Summer CERN - European Organization for Nuclear Research Geneva, Switzerland

- I worked in the CMS group and studied a system for the acquisition of temperature data in the CMS ECAL. This research was published in "G. Dissertori, A. Lister, W. Lustermann, F. Riva: Study of a cascaded multiplexing system for slow control applications, CMS Internal Note CERN, Geneva, Switzerland; 13.3.2003"
- 2001 2003 ETHZ Swiss Federal Institute of Technology

Zürich, Switzerland

- Teaching Assistant for the Department of Mathematics and the Department of Physics. I tutored different classes on *Linear Algebra, Analysis, Physics, Mathematics* and *Complex Analysis*.
- 2003 High School of Lugano Trevano

Lugano, Switzerland

• Substitute teacher in physics and in mathematics.

LANGUAGES

Italian is my mother tongue, but I also speak currently English, French, German and Spanish. I practiced these languages while studying in Oxford, Lausanne, and Zürich (and learnt spanish from my Argentinean mother).

INTERESTS AND OTHER SKILLS

I am a passionate photographer and have published several photography articles, mostly related with traveling, and held exhibitions in Switzerland and England. I spend most of my free time outdoors, rock climbing, mountaineering and skiing, but also deep water diving and cycling.

I designed and maintained the site <u>www.elyriva.ch</u>, for advertising the work of a professional photoreporter (my father), and also my own photography webpage at <u>www.cincio.ch</u>.

REFEREES

Prof John March-Russell Rudolf Peierls Centre for Theoretical Physics University of Oxford 1 Keble Road Oxford, OX1 3NP, UK Email: jmr@thphys.ox.ac.uk Tel: +44 (0) 1865-273971

Prof Gian Giudice Theory Division CERN CH–1211 Geneva 23 Switzerland

Email: gian.giudice@cern.ch Tel: +41 (0) 22 767 32 03 Prof Subir Sarkar Rudolf Peierls Centre for Theoretical Physics University of Oxford 1 Keble Road Oxford, OX1 3NP, UK Email: sarkar@thphys.ox.ac.uk Tel: +44 (0) 1865 273962

Prof Antonio Riotto Theory Division CERN CH–1211 Geneva 23 Switzerland

Email: antonio.riotto@pd.infn.it Tel: +41 (0) 22 767 41 41