

Ivica Smolić

University of Zagreb
Faculty of Science
Physics Department

Curriculum Vitae

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Phone: +385 1 460 5588

E-mail: ism@phy.hr

Born 18 July 1980, Šibenik (Croatia)

Education

1986 – 1994 Elementary school (“Tin Ujević”, Šibenik)
1994 – 1998 High school (Gimnazija Antuna Vrančića, Šibenik)
1998 – 2004 Faculty of Science, Zagreb

2004 **BSc** (September 21st)
Diploma thesis: *Lovelock gravitation*,
advisor: Prof. Silvio Pallua

2005 – 2010 PhD student, University of Zagreb

2010 **PhD** (July 9th)
PhD Thesis: *Hawking radiation, W algebras and anomalies*
advisors: Prof. Silvio Pallua and Prof. Lorian Bonora

Postdoc

November 2010 – November 2011 at SISSA, Trieste (CERES Fellowship)

Physics schools and courses

2005

Sep 6 – Sep 10 (Mali Lošinj, Croatia) V International Conference on Science, Art and Culture; *On The Present Status of Quantum Mechanics*

Nov 25 – Nov 27 (Vienna, Austria) 2nd Vienna Central European Seminar on Particle and Quantum Field Theory; *Frontiers in Astroparticle Physics*

2006

May 29 – Jun 2 (Zagreb, Croatia) Specialized course Zagreb; L. Bonora: *Propaedeutical course on Cosmology and Strings*

Aug 21 – Sep 2 (Dubrovnik, Croatia) School on Particle Physics, Gravity and Cosmology

2007

May 28 – Jun 7 (Trieste, Italy) Specialized course SISSA; G. Dell'Agata: *Supergravity* and A. Uranga: *Braneworld*

Jun 12 – Jun 22 (Prague, Czech Republic) Specialised course Charles University Prague; C. Becchi: *Renormalization*

Sep 12 – Sep 20 (Prague, Czech Republic) Central European School in Particle Physics

Aug 24 – Aug 28 (Vienna, Austria) Intensive courses; H. Grosse: *Quantum Field Theory and Noncommutative Geometry* and J. Ygvanson: *Local Quantum Physics*

2008

Aug 24 – Aug 30 (Veli Lošinj, Croatia) Workshop on Black Holes in General Relativity and String Theory

2009

May 25 – May 29 (Ljubljana, Slovenia) International School on Selected Topics in Particle Physics; M. Cvetič: *Topics in Advanced Quantum Field Theory* and B. Bajc: *Introduction to Supersymmetry*

Jun 15 – Jun 26 (Trieste, Italy) Summer School on Particle Physics in the LHC Era (ICTP)

2010

May 24 – May 28 (Ljubljana, Slovenia) Intensive courses; G. Senjanović: *Neutrino Masses, LHC and GUT* and D. Bečirević: *Flavour Physics and CP violation*

Jun 21 – Jun 26 (Trpanj, Croatia) Croatian Black Hole School

Research interests

Black holes, spacetime causal structure and topology, quantum gravity

Working Experience

2004–2010 Research/Teaching assistant (University of Zagreb, Theoretical Physics Department)

List of publications

1. M. Cvitan, P. Dominis Prester, S. Pallua and I. Smolić: *Extremal black holes in $D = 5$: SUSY vs. Gauss-Bonnet corrections*, JHEP **0711** (2007) 043
2. M. Cvitan, P. Dominis Prester, A. Ficnar, S. Pallua and I. Smolić: *Five dimensional black holes in heterotic string theory*, Fortschr. Phys. **56** (2008) 406
3. L. Bonora, M. Cvitan, S. Pallua and I. Smolić: *Hawking fluxes, W_∞ algebra and anomalies*, JHEP **0812** (2008) 021
4. L. Bonora, M. Cvitan, S. Pallua and I. Smolić: *Hawking fluxes, fermionic currents, $W_{1+\infty}$ algebra and anomalies*, Phys. Rev. D **80** (2009) 084034

5. L. Bonora, M. Cvitan, P. Dominis Prester, S. Pallua, I. Smolić: *Gravitational Chern-Simons Lagrangians and black hole entropy*, JHEP **07** (2011) 085
6. L. Bonora, M. Cvitan, P. Dominis Prester, S. Pallua, I. Smolić: *Gravitational Chern-Simons Lagrangian terms and spherically symmetric spacetimes*, Class. Quant. Grav. **28** (2011) 195009
7. E. Franzin and I. Smolić: *A new look at hidden conformal symmetries of black holes*, JHEP **09** (2011) 081

Conference proceedings

1. M. Cvitan and I. Smolić: *Hawking fluxes, anomalies and W_∞ algebra*, PoS, BH-GRS, (2008)
2. L. Bonora, M. Cvitan, S. Pallua and I. Smolić: *Hawking radiation and W_∞ algebra*, PoS, ISFTG, (2009)