

## **Benedetto Scoppola**

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Born in Rome, Italy, october 26, 1961.

Laurea cum laude in Physics, Universita' di Roma "La Sapienza", 1987

### **Positions:**

*1987-1994*

Grants from:

Istituto Nazionale di Fisica Nucleare,

Consiglio Nazionale delle Ricerche,

Rutgers University, New Brunswick, New Jersey

*1994-2002*

Assistant Professor in Mathematical Physics, Dipartimento di Matematica, Universita' di Roma "La Sapienza".

*2002-present*

Associate Professor in Mathematical Physics, Dipartimento di Matematica, Universita' di Roma "Tor Vergata"

### **Congresses and seminars:**

Invited speaker in many International conferences. Among them:

- "Many fermions systems in one dimension" in the congress "International congress in mathematical physics", Vancouver, 1993.
- "Some spin glass ideas applied to the clique problem". Joint seminar congress in Combinatorics, Probability and Statistical Mechanics, Oxford, 2007.
- "Randomised algorithms for the maximum clique problem". Combinatorics and statistical mechanics conference, Isaac Newton Institute, Cambridge, 2008.
- "Queueing systems with pre-scheduled random arrivals". International congress in mathematical physics, Corinaldo (Italy) 2009, and Eindhoven (The Netherlands) 2010.

### **Research appointments:**

Visiting professor in many Universities, in Europe and US. Among them:

- Rutgers University, New Brunswick, New Jersey
- University of Virginia, Charlottesville, Virginia
- Université de Montpellier 2, Montpellier, France

### **Publications:**

Author of more than 40 papers published on international journals with referee. Among them:

- G. Benfatto, G. Gallavotti, A. Procacci, B. Scoppola: Beta function and Schwinger functions for a many Fermions system in one dimension. Anomalous Fermi surface. Communications in Mathematical Physics 160, 93 (1994)
- A. Procacci, B.Scoppola: Statistical mechanics approach to coding theory. Journal of Statistical Physics 96, 907 (1999)
- A. Procacci, B.Scoppola, G. A. Braga, R. Sanchis: Percolation connectivity in the highly supercritical regime. Markov Processes and Related Field 10, n. 4, 607-628 (2004)

- A. Procacci, B. Scoppola and V. Gerasimov: Potts model on infinite graphs and the limit of chromatic polynomials. *Communications in Mathematical Physics.*, 235, n.2, 215-231 (2003)
- A. Procacci, B.Scoppola: Infinite graphs with a nontrivial bond percolation threshold: some sufficient conditions. *Journal of Statistical Physics*, 115, Nos 3/4, 1113-1127 (2004)
- A. Iovanella, B. Scoppola, E. Scoppola: Some Spin Glass Ideas Applied to the Clique Problem. *Journal of Statistical Physics* 126, n. 4-5, 895-915 (2007)
- S. Ndreca, B. Scoppola: Discrete time GI/Geom/1 queueing system with priority. *European Journal of Operational Research* 189, 1393-1402 (2008)
- R. Bissacot, Roberto Fernandez, A. Procacci, B.Scoppola, An improvement of the Lovasz local lemma via Cluster Expansion, *Combinatorics, Probability and Computing*, 20, 709-719 (2011)
- Guadagni, G. , Ndreca, S., Scoppola, B., Queueing systems with pre-scheduled random arrivals, *Mathematical Method for Operations Research* 73, 1-18 (2011).
- Gaudilliere, A., Scoppola, B., Scoppola, E., Viale, M., Phase transitions for the cavity approach to the clique problem on random graphs. *Journal of Statistical Physics*, DOI 10.1007/s10955-011-0336-2 (2011)
- Benedetto Scoppola, Exact Solution for a Class of Random Walk on the Hypercube, *Journal of Statistical Physics*, 143, 413-419 (2011)

**Teaching:**

twenty years of teaching experience in mathematics, physics and operations research courses in Engineering, Mathematics, Physics and in PhD courses in Mathematics and Physics. In the last years he has been supervisor of more than 60 bachelor and master thesis, and of two PhD thesis.