

# Home Page of Serena Causo

## Life

Born in [Gallipoli](#) (Lecce), October 9 1968

Married, one son: Gabriele

## Degrees

1993 - Graduation in Physics, [University of Lecce](#)

1998 - Ph.D in Physics, University of Lecce

## Positions held

May 1998 - February 2000 Postdoctoral position at [NIC](#) , Forschungszentrum Juelich, with Prof Peter Grassberger

March 2000 - December 2000 Postdoctoral position at [Department of Chemistry](#) , University of Toronto with Prof Stu Whittington

January 2001 - December 2002 INFM Postdoctoral position ``Giovani valenti" at [Scuola Normale Superiore](#) (Pisa) with Prof Sergio Caracciolo

January 2003 - May 2005 Postdoctoral position at the [Physics Department of the University of Rome "La Sapienza"](#) with Prof Giovanni Ciccotti

since June 2005 - [CASPUR](#) working in the group of Mario Rosati

## Papers

M.S. Causo, G. Ciccotti, D. Montemayor, S. Bonella, D.F. Coker, "An adiabatic linearized path integral approach for quantum time correlation functions: electronic transport in metal-molten salt solutions", to appear in Journal of Physical Chemistry

M.S. Causo, S.G. Whittington, "A Monte Carlo investigation of the localization transition in random copolymers at an interface", Journal of Physics A 36, L189 (2003)

M.S. Causo, B. Coluzzi, P. Grassberger "A simple model for DNA denaturation transition", Physica A 314, 607 (2002)

M.S. Causo, "Universal shape ratios for polymers grafted at a flat surface", Journal of Chemical Physics 117, 6789 (2002)

M.S. Causo, "Cut-and-permute algorithm for self-avoiding walks in the presence of surfaces", Journal of Statistical Physics 108, 247 (2002)

S. Caracciolo, M.S. Causo, A. Pelissetto, P. Rossi, E. Vicari, "Crossover phenomena in spin models with medium-range interactions and self-avoiding walks with medium-range jumps", Physical Review E 64, 046130 (2001)

E.J. Janse van Rensburg, A. Rechnitzer, M.S. Causo, S.G. Whittington, "Self-averaging sequences in the statistical mechanics of random copolymers", Journal of Physics A 34, 6381 (2001)

S. Caracciolo, M.S. Causo, G. Ferraro, M. Papinutto, A. Pelissetto "Bilocal dynamics for self-avoiding Walks", Journal of Statistical Physics 100, 1111 (2000)

R. Martin, M.S. Causo, S.G. Whittington, "Localization transition for a randomly coloured self-avoiding walk at an interface", *Journal of Physics* 33, 7903 (2000)

M.S. Causo, B. Coluzzi, P. Grassberger "Simple model for the DNA denaturation transition", *Physical Review E* 62, 3958 (2000)

S. Caracciolo, M.S. Causo, A. Pelissetto, "End-to-end distribution function for dilute polymers", *Journal of Chemical Physics*, 112, 7693 (2000)

S. Caracciolo, M. S. Causo, A. Pelissetto, P. Rossi, E. Vicari, "Crossover Scaling from Classical to Non-Classical Critical Behaviour", *Proceedings of the 1998 International Conference on Lattice Field Theory*, Boulder, July 1998, *Nuclear Physics B73 (Proc. Suppl.)* 757 (1999)

S. Caracciolo, M.S. Causo, P. Grassberger, A. Pelissetto, "Determination of the exponent  $\gamma$  for SAWs on the two-dimensional Manhattan lattice", *Journal of Physics A* 32, 2931 (1999)

H. Frauenkron, M.S. Causo, P. Grassberger, "Two-dimensional self-avoiding walks on a cylinder", *Physical Review E* 59, R16 (1999)

S. Caracciolo, M.S. Causo, A. Pelissetto, "Monte Carlo results for three-dimensional self-avoiding walks", *Nuclear Physics B (Proc. Suppl.)* 63, 652 (1998)

S. Caracciolo, M.S. Causo and A. Pelissetto, "Universality of Subleading Exponents Induced by One-Dimensional Defects: the Case of Self-Avoiding Walks", *Proceedings of the School "The Physics of Complex Systems"*, CXXXIV Course of the International School of Physics E. Fermi, Varenna, June 1996, 673 (1997).

E. Alfinito, M.S. Causo, G. Profilo, G. Soliani, "A class of nonlinear wave equations containing the continuous Toda case", *Journal of Physics A* 31, 2173 (1998)

S. Caracciolo, M.S. Causo, A. Pelissetto, "High precision determination of the critical exponent  $\gamma$  for self-avoiding walks", *Physical Review E* 57, R1215 (1998)

S. Caracciolo, M.S. Causo, A. Pelissetto, "Universality of subleading corrections for self-avoiding walks in the presence of one-dimensional defects", *Journal of Physics A* 30, 4939 (1997)

M.S. Causo, M. Martino, V. Nassisi, "Photoelectron-beam generation up to short threshold", *Applied Physics B* 59, 19 (1994)

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*Useful Links*

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