

# Curriculum Vitæ

Michele FABRIZIO

• **Personal Information:**

Nationality: Italian

Date of Birth: June 22<sup>th</sup>, 1964

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• **Education:**

- June 1988      **Laurea** in Physics, University of Rome “La Sapienza”  
Essay: *Thermal Properties of disordered and interacting electron systems with particular emphasis on the thermopower*,  
Supervisor: Prof. Claudio Castellani.
- October 1990    **Magister Philosophiæ** in Condensed Matter Theory,  
SISSA – Trieste  
Essay: *Few Electrons in the Hubbard Model*,  
Supervisors: Prof. Erio Tosatti and Prof. Alberto Parola.
- November 1992   **Doctor Philosophiæ** in Condensed Matter Theory,  
SISSA – Trieste  
Essay: *New Results for Interacting Fermi Systems: the 2D Hubbard Model and the Two Coupled Chain Problem*,  
Supervisors: Prof. Erio Tosatti and Prof. Alberto Parola.

- **Employment:**

- 12/1992 – 11/1994: post Doc position in the theory group of Prof. Philippe Nozières at the Institut Laue-Langevin, Grenoble (France).
- 12/1994 – 4/2001: Assistant Professor, SISSA – Trieste.
- 05/1997 – 06/1997: Visiting scientist at ESRF, Grenoble (France).
- 04/2001 – 08/2011: Associate Professor at SISSA – Trieste.
- 08/2011 – present: Full Professor at SISSA – Trieste.
- 04/2010 – 05/2010: Visiting Professor at the Université de Cergy-Pontoise (France).
- 03/2012 – 04/2012: Visiting Professor at the Université Paris-Sud 11, Laboratoire de Physique des Solides di Orsay (France).
- 12/1998 – 12/2012: Scientific Consultant, ICTP – Trieste.
- 2007 – 2011: Vice-head of the Condensed Matter Theory Group of SISSA.
- 2011 – 2012: Head of the Condensed Matter Theory Group of SISSA.
- 05/2012 – present: Coordinator of the Physics Area of SISSA.

- **Teaching experiences:**

- Course on Many Body Theory at SISSA PhD programme since 1994.
- PhD students who got the degree: Marco Airoldi, Massimo Capone, Luca Dell'Anna, Mahadi Zarea, Claudio Attaccalite, Lorenzo De Leo, Michel Ferrero, Manuela Capello, Maria Elisabetta Pezzoli, Nicola Lanatá, Marco Schiró, Pier Paolo Baruselli, Juan Felipe Carrasquilla, Giovanni Borghi, Giuseppe Carleo, Mohammad Zhian Asadzadeh, Matteo Sandri.

• **Publications updated to October 2014**

- 112 articles published on peer reviewed international journals.
- Citations: 2905.
- H-index: 31.

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- [1] A. Maraga, A. Silva, and M. Fabrizio. *Absence of thermalization in a fermi liquid*. Phys. Rev. B, **90**, 155131 (2014).
- [2] G. Borghi, M. Fabrizio, and E. Tosatti. *Gutzwiller electronic structure calculations applied to transition metals: Kinetic energy gain with ferromagnetic order in bcc Fe*. PHYSICAL REVIEW B, **90** (2014). ISSN 1098-0121.
- [3] T. Qin, M. Fabrizio, S. S. Naghavi, and E. Tosatti. *Robust  $s(+/-)$  superconductivity in a two-band Hubbard-Frohlich model of alkali-doped organics*. PHYSICAL REVIEW B, **90** (2014). ISSN 1098-0121.
- [4] A. Maraga, P. Smacchia, M. Fabrizio, and A. Silva. *Nonadiabatic stationary behavior in a driven low-dimensional gapped system*. PHYSICAL REVIEW B, **90** (2014). ISSN 1098-0121.
- [5] Y. Crespo, M. Fabrizio, S. Scandolo, and E. Tosatti. *Collective spin 1 singlet phase in high-pressure oxygen*. PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA, **111**, 10427–10432 (2014). ISSN 0027-8424.
- [6] G. Carleo, F. Becca, L. Sanchez-Palencia, S. Sorella, and M. Fabrizio. *Light-cone effect and supersonic correlations in one-and two-dimensional bosonic superfluids*. PHYSICAL REVIEW A, **89** (2014). ISSN 1050-2947.
- [7] R. Requist, S. Modesti, P. P. Baruselli, A. Smogunov, M. Fabrizio, and E. Tosatti. *Kondo conductance across the smallest spin 1/2 radical molecule*. PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA, **111**, 69–74 (2014). ISSN 0027-8424.
- [8] P. P. Baruselli, M. Fabrizio, A. Smogunov, R. Requist, and E. Tosatti. *Magnetic impurities in nanotubes: From density functional theory to Kondo many-body effects*. PHYSICAL REVIEW B, **88** (2013). ISSN 1098-0121.

- [9] M. Sandri and M. Fabrizio. *Nonequilibrium dynamics in the antiferromagnetic Hubbard model*. PHYSICAL REVIEW B, **88** (2013). ISSN 1098-0121.
- [10] S. S. Naghavi, M. Fabrizio, T. Qin, and E. Tosatti. *Electron-doped organics: Charge-disproportionate insulators and Hubbard-Frohlich metals*. PHYSICAL REVIEW B, **88** (2013). ISSN 1098-0121.
- [11] P. P. Baruselli, R. Requist, M. Fabrizio, and E. Tosatti. *Ferromagnetic Kondo Effect in a Triple Quantum Dot System*. PHYSICAL REVIEW LETTERS, **111** (2013). ISSN 0031-9007.
- [12] M. Behrmann, M. Fabrizio, and F. Lechermann. *Extended dynamic Mott transition in the two-band Hubbard model out of equilibrium*. PHYSICAL REVIEW B, **88** (2013). ISSN 1098-0121.
- [13] M. Z. Asadzadeh, F. Becca, and M. Fabrizio. *Variational Monte Carlo approach to the two-dimensional Kondo lattice model*. PHYSICAL REVIEW B, **87** (2013). ISSN 1098-0121.
- [14] M. Sandri, M. Capone, and M. Fabrizio. *Finite-temperature Gutzwiller approximation and the phase diagram of a toy model for V2O3*. PHYSICAL REVIEW B, **87** (2013). ISSN 1098-0121.
- [15] B. Marco, M.-I. Sara, M. Fabrizio, and P. Gilberto. *A case of nocturnal frontal lobe epilepsy in a patient with spinocerebellar ataxia type 17*. SEIZURE-EUROPEAN JOURNAL OF EPILEPSY, **21**, 805–806 (2012). ISSN 1059-1311.
- [16] G. Mazza and M. Fabrizio. *Dynamical quantum phase transitions and broken-symmetry edges in the many-body eigenvalue spectrum*. PHYSICAL REVIEW B, **86** (2012). ISSN 1098-0121.
- [17] M. Sandri, M. Schiro, and M. Fabrizio. *Linear ramps of interaction in the fermionic Hubbard model*. PHYSICAL REVIEW B, **86** (2012). ISSN 1098-0121.
- [18] P. P. Baruselli, A. Smogunov, M. Fabrizio, and E. Tosatti. *Kondo Effect of Magnetic Impurities in Nanotubes*. PHYSICAL REVIEW LETTERS, **108** (2012). ISSN 0031-9007.
- [19] P. Andre, M. Schiro, and M. Fabrizio. *Lattice and surface effects in the out-of-equilibrium dynamics of the Hubbard model*. PHYSICAL REVIEW B, **85** (2012). ISSN 1098-0121.
- [20] P. P. Baruselli, A. Smogunov, M. Fabrizio, and E. Tosatti. *Kondo effect of magnetic impurities on nanotubes*. PHYSICA E-LOW-DIMENSIONAL SYSTEMS & NANOSTRUCTURES, **44**, 1040–1044 (2012). ISSN 1386-9477. European Materials Research Symposium on Science and Technology of Nanotubes, Nanowires and Graphene (EMRS), Strasbourg, FRANCE, JUN 07-11, 2010.

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- [23] L. Dell’Anna and M. Fabrizio. *How localized bosons manage to become superfluid*. JOURNAL OF STATISTICAL MECHANICS-THEORY AND EXPERIMENT (2011). ISSN 1742-5468.
- [24] J. Carrasquilla, F. Becca, and M. Fabrizio. *Bose-glass, superfluid, and rung-Mott phases of hard-core bosons in disordered two-leg ladders*. PHYSICAL REVIEW B, **83** (2011). ISSN 1098-0121.
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