

UNIVERSITÀ DEGLI STUDI DELL'AQUILA

Prof. Alessandra Continenza Curriculum scientifico

(Aggiornato il 19/11/2018)

Personal data

MARITAL STATUS: Married, 2 daughters

PRESENT POSITION: Full

Professor - Dipartimento di Scienze Fisiche e Chimiche - University L'Aquila (ITALY)

Home page: http://www.aquila.infn.it/continen/

Education

Laurea in Fisica- 110 magna cum laude University L'Aquila

Ph.D. Field of Physics - Northwestern University, Evanston, IL (U.S.A.)

Professional positions held:

Jun. 1983 - Jun. 1984 Software analyst at ITALSIEL Roma.

Jul. 1984 - Oct. 1984 Research Ass. at Research & Development Labs. ITALTEL - Milano (Italy).

Oct. 1984 - Sept.1985 Appointed as Physics Teacher in public High School

Sept. 1985 - Grant from the Italian Department of Education

Sept. 1985 - Oct. 1990 Research Assistant and Research Associate at Material Research Center - Northwestern University, Evanston, II (USA)

Oct. 1990 - Oct. 2000 Research Assistant Dipartimento di Fisica -University L'Aquila.

Nov. 2000 -2018 Appointed as Associate Professor Dipartimento di Fisica - University L'Aquila.

Spring 2007 Appointed as Guest Professor at University of Vienna (Austria) 2009 - present Member of the Editorial board of the Journal of Magnetism and Magnetic Materials 2010-present Expert member of the Panel for the evaluation of EU-pojects

2011 Member of the International Advisory Board of the Korean Magnetics Society

2011 Member of the Editorial Board of the Journal of Magnetics published by the Korean Magnetics Society

2011 Member of the International Advisory Committee of the International Conference of Magnetism (ICM 2012).

2014 Member of the International Advisory Committee of the International Conference of Magnetism (ICM 2015).

2012-present Chair of Physics studyboard at Università degli studi dell'Aquila

2013 National abilitation as Full Professor in Physics of Condensed Matter Theory

2016 Outstanding Referee of the American Physical Society

2018 Appointed as Full Professor Dipartimento di Scienze Fisiche e Chimica - Università degli studi dell'Aquila

Primary fields of scientific interest:

First principle studies of electronic structure and energetics in bulk materials, interfaces and surfaces.

1) Semiconductor/semiconductor and metal/semiconductor interfaces: potential barrier and band lineups at heterojunctions and their dependence on substrate (epitaxial strain),

ordering direction and intrinsic polarization.

Possibility of tuning ad hoc electronic properties for device applications.

2) Superconductivity: ab-initio study of electronic properties of several different compounds (high temperature compounds, as well as conventional superconductors)

and effects of dopants and substitutions.

3) Electronic and magnetic properties of magnetic semiconductors and their dependence on compositions and magnetic alignment.

The results of the research activity have been published in international journals with referees (more than 140 publications) and presented at several international conferences.

Collaborations:

Universita' di Cagliari: Prof. F. Bernardini University of Vienna: Prof. R. Podloucky Technische Univ.Wien: Prof. J. Redinger