

## Alberto Debernardi Short CV

### *Education:*

2001, Degree "Habilitation à Diriger des Recherches", at the Université Louis Pasteur, Strasbourg (France), with a dissertation on *Vibrational properties of Solids from density functional theory*.

1995 PhD (Doctor Philosophiae in teoria degli stati condensati) at the SISSA (Trieste), with a thesis on *Anharmonic properties of semiconductors from density functional perturbation theory*".

1993, degree "Magister Philosophiae in teoria degli stati condensati" at Scuola Internazionale Superiore di Studi Avanzati (SISSA), Trieste, with a thesis on *Anharmonic effects in crystals from density functional perturbation theory*".

1990, degree "dottore in Fisica", Università degli Studi di Pavia, full marks "cum laude", with a thesis on *Density functional theory of Wigner crystallization in two dimensions*".

### *Appointments / current position:*

since 2004 Senior researcher (primo ricercatore) at MDM laboratory, CNR-IMM, unit of Agrate Brianza, Italian Council of Research.

2001-2004 Researcher (ricercatore) at INFN, at Trieste University/SISSA

July 2002, July 2003 Invited professor at the Tours University.

1999-2000 Post-doc (chercheur invité post doctorant) at the IPCMS of Strasbourg

1996-1998 Post-doc (visiting scientist) at the MPI-Stuttgart.

Alberto Debernardi has mainly developed his professional experience within the framework of density functional theory. He has been responsible of several national super computing projects at CINECA (2001-present), LISA (2013,2014) and at CASPUR (2006, and 2009-2012). He has been principal investigator of the project *"Oxides for Spin Electronic Applications"* (OSEA) financed by Cariplo foundation (2010-2013). He has a large experience in the numerical simulation in condensed matter physics. His present research interests include high dielectric oxides, quantum computation, diluted magnetic semiconductors, nano-electronics, spintronics, and topological materials.