

PhD Physics - 18th Cycle

Name and Surname	Title of the Thesis	Tutor	Graduation year
Nasser Afify	Structural characterization of Er ³⁺ -doped SiO ₂ - HfO ₂ and SiO ₂ - TiO ₂ waveguides by EXAFS and XRD.	G. Dalba	2005
Silvia Amerio	TTBAR - TAU + JETS Analysis at CDFII Using neural networks	I. Lazzizzera	2005
Giuseppe Aprea	Flow equation analysis of electron-electron and electron-phonon interaction interplay in the Hubbard-Holstein model	E. Lipparini	2006
Giacomo Baldi	Damping of vibrational excitations in structural glasses: a Brillouin scattering and numerical simulation study	G. Viliani	2005
Nicola Bazzanella	Hydrogen kinetics and thermodynamic in magnesium-based metal hydrides	A. Miotello	2005
Nicola Coppedè	A novel approach to nano-hybrid materials based on the codeposition of supersonic molecular and cluster beams	M. Scotoni	2005
Marco Cozzini	Rotating Bose-Einstein Condensate: vortex lattices and collective modes	S. Stringari	2005
Giampaolo Demarchi	Spectroscopy investigation of collisional molecular alignment in supersonic beam expansion	M. Scotoni	2006
Elena Froner	Nanostructured silicon for biomedical applications: preparation and surface functionalization	M. Scarpa	2006
Sebastiano Mariuzzi	Application of positron spectroscopy for defect characterization	R.S. Brusa	2005
Michela Masè	Synchronization of electrical activity in the heart during atrial arrhythmias: computer modelling and data analysis	R. Antolini	2006



PhD Programme in Physics

Mirko Melchiorri	Local dynamics and negative thermal expansion: an Silicon based optical waveguide and photonics devices	L. Pavesi	2006
Antonio Negretti	Quantum engineering with ultra-cold neutral atoms	T. Calarco	2005
Silvia Poggi	A joint search for gravitational wave bursts by the Auriga resonant detector and the LIGO interferometer observatories	G.A. Prodi	2006
Francesco Riboli	Classical and photonics crystals waveguides for novel integrated optical device	L. Pavesi	2005
Cesare Tozzo	Exciting and probing Bogoloubov quasi-particles in trapped Bose- Einstein Condensate	F. Dalfovo	2005