

Posters

- S. Achilli, *Theoretical spectroscopy characterization of deep electronic states due to implanted Ge atoms in Silicon*
- V. Antonelli, *Neutrino phenomenology: from mass and mixing studies to Standard Model precision tests with natural and artificial sources*
- M. Avolio, *Experimental determination of the frequency and field dependence of Specific Loss Power in Magnetic Fluid Hyperthermia*
- G. Ballabio, *Modelling of the observed structure in HL TAU: simulating dust in SPH*
- M. Basini, *Effect of the hollow topology on the local spin dynamics in Iron Oxide MNPs*
- P. Battistoni, *Superconducting Fluctuations in Calcium based High-Tc Superconductors*
- C. Benedetti, *All-optical quantum simulator of qubit noisy channels*
- M. Bina, *Optical quantum communication with PNR detectors: phase estimation and coherent-state discrimination in the presence of phase noise*
- I. Bolognino, *SABRE - Sodium iodide with Active Background REjection*
- V. Bonanni, *X-ray magnetic circular dichroism discloses surface spins disorder in maghemite hollow nanoparticles*
- S. Bonfanti, *Atomic-scale front propagation at the onset of frictional sliding*
- S. Bottoni, *Shape transitions and particle/hole - core couplings in atomic nuclei*
- L. Caccianiga, *Il prossimo futuro della fisica dei raggi cosmici di altissima energia*
- S. Capra, *Technological Challenges and Solutions for the Front-End Electronics of Solid-State Radiation Detectors*
- C. Carbone, *The impact of massive neutrinos on cosmic structure formation: bridging cosmology and particle physics*
- S. Carrà, *Search for direct production of electroweakinos in multileptons final states at LHC Run 2 with the ATLAS detector*
- M. Chighizola, *Investigation of bio-mechanical interactions in cellular systems by atomic force microscopy*
- M. Cobianchi, *Effects of organic coating on hyperthermia efficiencies*
- G. Costantini, *Glassy features of crystal plasticity*
- F. Crespi, *Study of Nuclear Collective Modes Using High-Resolution Gamma-Ray Spectroscopy*
- F. Delodovici, *A new class of carbon allotropes*
- A. C. Forello, *High-time resolved atmospheric aerosol characterisation for source apportionment studies*
- A. Franchini, *Constraining black hole spins through relativistic precession of accretion discs*
- D. E. Galli, *Memetic Phase Retrieval for Coherent Diffraction Imaging*
- D. E. Galli, *1D soft Bosons across the liquid/cluster-liquid transition: the interplay between Luttinger and quantum Ising universality classes*
- S. Gallo, *Characterization of phenolic solid state pellets for ESR dosimetry with radio-therapeutic photon and electron beams*
- F. Groppi, *SPLASH... a dip in environmental radioactivity*
- F. Groppi, *NASAR: a project on nanosafety research by radiochemical and nuclear techniques*
- A. Guglielmetti, *Astrofisica nucleare ai Laboratori Nazionali del Gran Sasso: presente e futuro dell'esperimento LUNA*
- L. Guzzo, *EUCLID: the next generation ESA Cosmology Mission*
- A. Hawken, *Understanding galaxy and large-scale structure evolution over the past 8 Gyrs with the VIPERS galaxy survey*
- A. Lascialfari, *Magnetic properties and spin dynamics in molecular magnets with integer spin values*
- N. Ludwig, *Giotto unveiled: new developments in imaging and elemental analysis techniques for Cultural Heritage*
- V. Marinuzzi, *Design di un dipolo superconduttivo da 16 T per il Future Circular Collider*
- S. Mariotto, *Magnete Superconduttivo Circolare Ferro-Dominato*
- A. Meli, *Multi exponential analysis of the NMR spin-spin relaxation time on healthy and damaged human tissues*
- A. Merli, *Search for new physics via baryon EDM at LHC*
- M. Mirigliano, *Characterization of the transport electrical properties in nanostructured metallic granular films*
- E. Molten, *Optical properties of stacked eumelanin protomolecules*
- A. Murrone, *Measurement of CP-violation in the Higgs to tau tau channel using Vector Boson Fusion events*
- F. Orsini, *Reversible dissolution of lipid microdomains in cancer cell membranes at physiological temperature*
- C. Pagani, *LASA Cs2Te Photocathodes: the electron source for the XFELs*
- C. Pagani, *The LASA Superconducting RF Cavities for Particle Accelerators*
- M. Petruzzo, *Real-time tracking system based on artificial retina algorithm. Testbeam results and future developments for application at HL-LHC*
- D. Pini, *A DFT study of self-assembly in symmetric binary Gaussian mixtures*
- M. Potenza, *Characterization of aeolian dust grains in Antarctica ice cores*
- E. Ragusa, *Evolution of non-axisymmetric structures in protoplanetary discs*
- M. Romé, *Turbulence evolution in magnetized non-neutral plasmas*
- L. Rossini, *Operation and Radiation Damage studies of the ATLAS Pixel Detector*
- M. Rossini, *Cluster versus single-particle hopping in a colloidal model*
- S. Sala, *Antimatter-wave interferometry in QUPLAS*
- D. Sangalli, *Pump and probe experiments from first principles*
- G. Savini, *Investigation of cerebellar microstructure with two-compartment Spherical Mean Technique*
- M. Siano, *Diagnostics of high brilliance radiation from relativistic beams*
- G. Tanzi Marlotti, *A two-particle model for Positronium confined in sub-nanometric cavities*
- M. G. Ubeira Gabellini, *Observational studies of star formation and protostellar disc dynamics*
- S. Valentini, *Tailoring coefficients in IMPROVE algorithm to assess site-specific chemical light extinction*
- S. M. Valle, *Secondary charged fragments tracking for on-line beam range monitoring in Particle Therapy*
- S. M. Valle, *The FOOT (FragmentatiOn Of Target) experiment*
- I. Veronese, *Hyperthermia properties of fiducial markers used in Image-Guided Radiation Therapy*
- B. Veronesi, *Surfing the spirals waves of giants: on the origin of the spiral structure in HD135344B*



UNIVERSITÀ DEGLI STUDI DI MILANO

DIPARTIMENTO DI FISICA

Congresso del Dipartimento di Fisica

28-29 June 2017

The Department of Physics is located in via Celoria 16, Milano.

It hosts research activities in various domains of fundamental and applied Physics as well as a research unit of the National Institute of Nuclear Physics (INFN). Research is also performed in collaboration with other national research agencies as the National Institute of Astrophysics (INAF) and the National Research Council (CNR). The Department also hosts the activity of the Interdisciplinary Center of Nanotechnologies (CIMAINA) and performs basic and applied research in collaboration with private companies and government agencies.

The Department employs about 80 research staff members, and 40 administrative and technical staff units. Several Italian and foreign students of the PhD School and Post-Docs contribute to the research activities of the Department.

As you explore the site www.fisica.unimi.it you will find a wealth of information about us: who we are, what research we do, what academic programs we offer, what talks and seminars are scheduled, employment opportunities, and much more.

We especially welcome to our workshop and webpages prospective students of all kinds: high school students thinking of studying in Milan and prospective graduate students of our PhD School (infos about applications at phd.fisica.unimi.it).

Chairperson

L. Perini

Scientific Committee

P. F. Bortignon
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The Congress will take place in
Aula Chisini at the Department of Mathematics, via Saldini 50, Milan

www.fisicamilano.it

Wednesday, June 28

9:15 - 9:30	Opening
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Chairman: Laura Perini

9:30	G. Rossi L. Serafini	<i>Development of a user analytical facility at the EXPO Science Campus of Unimi based on an advanced Compton/FEL EM radiation source</i>
9:55	G. Ferrera	<i>Precise theoretical predictions for LHC physics</i>
10:20	M. Fanti	<i>Discovery of the Higgs boson and most recent measurements at LHC</i>
10:45	D. D'Angelo	<i>Complementary approaches to Dark Matter search</i>
11:10 - 11:30	Break	

Chairman: Stefano Forte

11:30	L. G. Molinari	<i>Jack on a Devil's staircase (on the ground states of the fractional quantum Hall effect)</i>
11:55	A. C. Re	<i>The Neutrino: looking through its experimental world</i>
12:20	M. Sorbi	<i>Recent developments in accelerators physics</i>
12:45 - 14:30	Lunch & Posters	

Chairman: Francesco Ragusa

14:30	X. Roca Maza	<i>Towards a universal nuclear structure model</i>
14:55	S. Leoni	<i>Recent developments and perspectives in nuclear structures by gamma and particle spectroscopy</i>
15:20	M. Tomasi	<i>Beyond Planck: a new generation of CMB polarization experiments</i>
15:45 - 16:15	Break	

Chairman: Angela Bracco

16:15	L. Guzzo	<i>DARKLIGHT: Illuminating dark energy with galaxy redshift surveys</i>
16:40	G. Lodato	<i>Planet Formation in the ALMA Era</i>
17:05	V. Petrillo	<i>Compton sources with angular momentum</i>

Thursday, June 29

9:15 - 9:30	Aldo Pontremoli
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Chairman: Alberto Pullia

9:30	I. Veronese	<i>Recent progresses in scintillating optical fiber dosimeters</i>
9:55	F. Groppi	<i>Optimization of the production of non-conventional high specific activity radionuclides for medicine, toxicology and nanotoxicology</i>
10:20	P. Arosio	<i>Magnetic nanoparticles: recent advances in biomedical applications</i>
10:45	G. Tiana	<i>Maximum-entropy modeling of biomolecules</i>
11:10 - 11:30	Break	

Chairman: Marco Bersanelli

11:30	V. Bernardoni	<i>Optical properties of atmospheric aerosol: development of innovative instrumentation and modelling applications</i>
11:55	F. Borghi	<i>Investigation of the early stages of growth of zirconia nanostructures produced by supersonic cluster beam deposition: from the sub-monolayer to the thin film regime</i>
12:20	M. Di Vece	<i>Charge effects in thin a-Si films with embedded gold particles</i>
12:45 - 14:30	Lunch & Posters	

Chairman: Paolo Milani

14:30	M. G. Genoni	<i>Quantum Control for Advanced Quantum Metrology</i>
14:55	G. Maero	<i>Generation and active control of coherent structures in partially neutralized magnetized plasmas</i>
15:20	G. Fratesi	<i>Spectroscopy of adsorbates and the role of interfacial interactions</i>
15:45 - 16:15	Break	

Chairman: Giovanni Onida

16:15	F. Pezzotta	<i>Applications and control of 3D printing FDM processes in the domain of scientific research inside the Department of Physics</i>
16:40	A. Stabile	<i>R&D on electronic devices and circuits for the HL-LHC</i>
17:05	A. Vailati	<i>The NEUF-DIX Space Project: understanding diffusion in complex fluids</i>