

**XLVII NATIONAL CONGRESS ON MAGNETIC RESONANCE**

TORINO 19-21 SEPTEMBER 2018

**SCIENTIFIC PROGRAM**

**Wednesday September 19<sup>th</sup>**

10:00-13:00	<b>Registration</b>	
10:30-12:30	<b>Bruker satellite meeting (registration starts at 10:00)</b>	
12:45-14:00	<b>Bruker Lunch</b>	
14:00-14:30	<b>Opening</b>	
	<b>Plenary session</b>	
14:30-15:30	<b>GIDRM/GIRM gold medal award</b> <b>L. Mannina</b> - MY PERSONAL HISTORY WITH NMR: FROM THE CHEMICAL STRUCTURE OF SINGLE COMPOUNDS TO THE STUDY OF COMPLEX MIXTURES	
15:30-16:15	<b>ChemPubSoc Plenary Lecture</b> <b>A. Kenwright</b> - COMPRESSED NMR: MORE INFORMATION IN THE SAME SPACE & TIME	
16:15-17:20	<b>Coffee break + Poster session</b>	
	<b>Parallel session</b>	<b>Parallel session B</b>
17:20-17:50	<b>E. Gianolio</b> - LOW RESOLUTION NMR AS A POWERFUL TOOL FOR DIAGNOSTIC PURPOSES	<b>C. Airoidi</b> - NMR INTERACTION STUDIES FOR IDENTIFICATION AND DEVELOPMENT OF NEW BIOACTIVE COMPOUNDS
17:50-18:10	<b>M. R. Ruggiero</b> - INTRACELLULAR WATER LIFETIME AS A TUMOUR BIOMARKER BY FFC-RELAXOMETRY	<b>V. Righi</b> - BIOMARKERS OF ONCOLOGICAL PROGRESSION IN ACTINIC KERATOSIS AND EFFECTS OF INGENOL MEBUTATE: A SKIN METABOLIC ANALYSIS
18:10-18:30	<b>L. Bianchini</b> - REPEATABILITY AND ROBUSTNESS OF RADIOMIC FEATURES EXTRACTED FROM MAGNETIC RESONANCE IMAGES: A PHANTOM STUDY	<b>C. Ingallina</b> - "CORNETTO DI PONTECORVO DOP" RED SWEET PEPPER CHARACTERIZED BY A MULTI-METHODOLOGICAL APPROACH
	<b>Plenary session</b>	
18:30-19:00	<b>Stelar Lecture</b> <b>D. Brougham</b> - FFC-NMR RELAXOMETRY STUDIES INTO THE INFLUENCE OF DYNAMICS ON FUNCTION IN NANO-MATERIALS FOR BIO-APPLICATION	
19:00-19:45	<b>Plenary Lecture 2</b> <b>S. Aime</b> - DESIGN AND TESTING OF MR MOLECULAR IMAGING REPORTERS	

Thursday September 20<sup>th</sup>

	<b>Plenary session</b>	
8:45-9:30	<b>Plenary Lecture 3</b> <b>I. Shimada</b> - DEVELOPMENTS AND APPLICATIONS OF NOVEL NMR METHODS TO CHARACTERIZE FUNCTIONAL DYNAMICS OF HIGH MOLECULAR WEIGHT PROTEINS	
9:30-10:00	<b>Bruker Lecture</b> <b>B. Perrone</b> - BIOSOLIDS CRYOPROBE, AUTOMATION WITH MAS PROBES, AND OTHER SOLID-STATE NMR NEWS	
10:00-10:30	<b>Under 35 GIDRM award</b> <b>E. Carignani</b> - SOLID STATE DYNAMICS PROBED BY NMR SPECTROSCOPY AND RELAXOMETRY: FROM CRYSTALS TO SOFT MATTER	
10:30-11:20	<b>Coffee break + Poster session</b>	
	<b>Parallel session</b>	<b>Parallel session B</b>
11:20-11:50	<b>R. Lamanna</b> - <sup>1</sup> H NMR CHARACTERIZATION OF AGING PROCESSES IN PRECURSOR SOLUTIONS USED FOR YBCO SUPERCONDUCTORS PRODUCTION	<b>R. Pierattelli</b> - UN-STRUCTURAL BIOLOGY BY NMR SPECTROSCOPY
11:50-12:20	<b>P. Cerreia Vioglio</b> - A TIME-RESOLVED, IN-SITU DNP NMR APPROACH TO GAIN INSIGHTS INTO METASTABLE POLYMORPHS OF GLYCINE	<b>M. Assfalg</b> - INSIGHT INTO TRANSIENT PROTEIN-NANOPARTICLE INTERACTIONS BY SOLUTION NMR
12:20-12:40	<b>G. Stevanato</b> - AN EFFICIENT Gd <sup>3+</sup> BASED COMPLEX FOR HIGH FIELD DYNAMIC NUCLEAR POLARIZATION	<b>M. Grimaldi</b> - DESIGN OF PEPTIDES FOR THE EARLY DIAGNOSIS OF ALZHEIMER DISEASE
12:40-13:00	<b>F. Paruzzo</b> - NMR MEETS MACHINE LEARNING: CHEMICAL SHIFT PREDICTIONS IN SOLIDS IN LESS THAN A MINUTE	<b>F. Favretto</b> - UNRAVELING THE ROLE OF CIS-TRANS PEPTIDYLPROLYL ISOMERASES IN PARKINSON'S DISEASE
13:00-14:20	<b>Lunch + Poster session</b>	
	<b>Plenary session</b>	
14:20-15:05	<b>Plenary Lecture 4</b> <b>S. Mammi</b> - NMR CONTRIBUTIONS TO COFFEE SCIENCE: A STORY OF TECHNOLOGY TRANSFER FROM ACADEMIA TO INDUSTRY	
15:05-15:35	<b>Jeol Lecture</b> <b>A. Botana</b> - SPEEDING UP STRUCTURAL ELUCIDATION WITH NMR	
15:35-16:15	<b>Segre Fellowships 2017</b> <b>T. Cappello</b> - EFFECTS OF POLYSTYRENE MICROPLASTICS IN MARINE MUSSELS <i>MYTILUS GALLOPROVINCIALIS</i> BY NMR-BASED METABOLOMICS <b>E. Costanzi</b> - STRUCTURAL CHARACTERIZATION OF THE INTERACTION BETWEEN THE STAS DOMAIN OF MAMMALIAN PRESTIN AND CALMODULIN	
16:15-17:30	<b>Coffee break + Poster session</b>	
17:00-17:30	<b>GIRM assembly</b>	
17:30-19:30	<b>GIDRM assembly + announcement of poster competition winner</b>	
20:30	<b>Social dinner</b>	

**Friday September 21<sup>st</sup>**

	<b>Plenary session</b>	
8:45-9:30	<b>Plenary Lecture 5</b> <b>J. N. Dumez</b> – DIFFUSION NMR OF OUT-OF-EQUILIBRIUM MIXTURES	
	<b>Parallel session A</b>	<b>Parallel session B</b>
9:30-10:00	<b>P. Arosio</b> - THE EFFECT OF CHEMICO-PHYSICAL PARAMETERS OF MAGNETIC NANOPARTICLES ON THEIR FUNDAMENTAL AND BIOMEDICAL APPLICATIVE PROPERTIES: A FEW CASE STUDIES	<b>G. Malgieri</b> – METAL ION RECRUITMENT DRIVES THE FOLDING MECHANISM AND SELF-ASSOCIATION PROPENSITY OF HIGH HOMOLOGOUS PROTEINS
10:00-10:20	<b>F. Capuana</b> - A NOVEL TETRAMERIC GADOLINIUM BASED CONTRAST AGENT FOR MR MOLECULAR IMAGING OF TROPOELASTIN	<b>F. Nardelli</b> – SUCCINIMIDE-BASED CONJUGATES IMPROVE ISODGR CYCLOPEPTIDE AFFINITY TO AVB3 WITHOUT PROMOTING INTEGRIN ALLOSTERIC ACTIVATION
10:20-10:40	<b>F. Carniato</b> – NMR DETERMINATION OF THE HYDRATION NUMBER AND EXCHANGE RATE OF THE BOUND WATER MOLECULE ACROSS THE LN[AAZTA]-SERIES	<b>F. Munari</b> – STRUCTURAL AND MOLECULAR RECOGNITION PROPERTIES OF UBB <sup>+1</sup> , A UBIQUITIN MUTANT ASSOCIATED WITH ALZHEIMER'S DISEASE
10:40-11:10	<b>Coffee break</b>	
	<b>Parallel session A</b>	<b>Parallel session B</b>
11:10-11:40	<b>F. Martini</b> – PHASE SEPARATION, DYNAMICS AND INTERACTION IN STARCH-SUCROSE AMORPHOUS BLENDS BY SOLID STATE NMR	<b>T. Pertinhez</b> - NMR IN TRANSFUSION MEDICINE
11:40-12:00	<b>F. Rossi</b> – ULTRAFAS MAS PROTON-DETECTED 3D SOLID STATE NMR EXPERIMENT TO RECOUPLE <sup>15</sup> N CHEMICAL SHIFT ANISOTROPY	<b>F. Savorani</b> - THE HUMAN URINARY METABOLOME TO ASSESS THE RISK-OF-POVERTY STATUS ACROSS EUROPEAN POPULATIONS: A NMR NUTRI-METABOLOMIC STUDY
12:00-12:20	<b>M. Mauri</b> – DIRECT AND INDIRECT EXPLORATION OF NANOCRYSTAL SURFACE	<b>G. Petrella</b> - A COMPREHENSIVE URINARY METABOLOMIC APPROACH BASED ON NMR AND LC-HRMS TO IDENTIFY BLADDER CANCER
	<b>Plenary session</b>	
12:20-12:50	<b>Poster competition winner lectures</b>	
12:50-13:35	<b>Plenary Lecture 6</b> <b>M. Duer</b> – HEAVY MICE AND LIGHT THINGS: USING SOLID-STATE NMR SPECTROSCOPY TO UNDERSTAND BIOLOGICAL TISSUES IN HEALTH AND DISEASE	
13:35-13:40	<b>Closing</b>	
13:40-15:00	<b>Lunch</b>	