

**XLVI NATIONAL CONGRESS ON MAGNETIC RESONANCE**

FISCIANO (SA) 27-29 SEPTEMBER 2017

**SCIENTIFIC PROGRAM**

**Wednesday September 27<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>	
14:30-15:30	<p><b>Chair: M. Geppi</b>  <b>GIDRM/GIRM gold medal award</b>  <b>A. Mele - MOLECULAR INTERACTIONS AND DYNAMICS AT A GLANCE: NMR AND BEYOND</b></p>	
15:30-16:15	<p><b>Plenary Lecture 1</b>  <b>H. Molinari - NMR STUDIES ON AMYLOID <math>\beta</math> PEPTIDES</b></p>	
16:15-17:20	<b>Coffee break + Poster session</b>	
	<b>Parallel session A</b> <b>Chair: D. Lurie</b>	<b>Parallel session B</b> <b>Chair: M. Edén</b>
17:20-17:50	<b>S. Geninatti Crich</b> - RELAXOMETRY OF CANCER: EFFECT OF WATER MOBILITY AND MAGNETIC FIELD STRENGTH ON TISSUE AND CELL WATER PROTON $T_1$	<b>P. Thureau</b> - DNP-ENHANCED SOLID-STATE NMR FOR THE STUDY OF POWDERS AT NATURAL ISOTOPIC ABUNDANCE
17:50-18:10	<b>D. Di Censo</b> - MRI CHARACTERIZATION OF STRUCTURAL MODIFICATIONS IN STRIATUM OF PARKINSON'S DISEASE RAT MODEL	<b>S. Sykora</b> - THE UNBEARABLE FUZZINESS OF NMR DATA?
18:10-18:30	<b>M. Tourell</b> - PROBING THE LONG-TIME DIFFUSION LIMIT IN MACROPOROUS SPHERES PACKINGS VIA LONG LIVED SINGLET STATES	<b>R. Spadaccini</b> - DNP-SOLID-STATE NMR STUDIES ON THE ATP-DRIVEN LIPID FLIPPASE MsBA
18:30-18:50	<b>M. Fantasia</b> - NUMERICAL ANALYSIS OF THE NESTED BIRDCAGE RF COIL CONFIGURATION FOR $^1\text{H}/^{23}\text{Na}$ MRI AT 2.35 T AND WORKBENCH VALIDATION	<b>E. M. Vasini</b> - PCBC - A NOVEL AUTOMATIC PHASE & BASELINE CORRECTION ALGORITHM
18:50-19:35	<p><b>Chair: L. Calucci</b>  <b>Plenary Lecture 2</b>  <b>D. Sakellariou</b> - COMPACT MAGNETIC RESONANCE: FRONTIERS AND CHALLENGES</p>	

**Thursday September 28<sup>th</sup>**

8:45-9:30	<b>Chair: E. Terreno</b> <b>Plenary Lecture 3</b> <b>D. Lurie</b> - FAST FIELD-CYCLING MAGNETIC RESONANCE IMAGING	
9:30-10:00	<b>Bruker Lecture</b> <b>H. Kovacs</b> - AVANCE NEO – BREAKTHROUGH IN MULTI-RECEIVE NMR TECHNOLOGY	
10:00-10:30	<b>Chair: M. Geppi</b> <b>Under 35 GIDRM award 2017</b> <b>G. Ferrauto</b> - ENHANCING SENSITIVITY OF CHEMICAL EXCHANGE SATURATION TRANSFER (CEST) MRI PROBES: FROM SMALL MOLECULES TO CELL-CEST AGENTS	
10:30-11:20	<b>Coffee break + Poster session</b>	
	<b>Parallel session A</b> <b>Chair: A. Mele</b>	<b>Parallel session B</b> <b>Chair: H. Molinari</b>
11:20-11:50	<b>M. Fragai</b> - CHARACTERIZATION OF L-ASPARAGINASE: NEW APPLICATIONS OF NMR IN BIOPHARMACEUTICAL RESEARCH	<b>A. Randazzo</b> - DNA G-QUADRUPLEX INTERACTING PROTEINS: FROM IDENTIFICATION TO CHARACTERIZATION
11:50-12:20	<b>S. Borsacchi</b> – SOLID STATE NMR SPECTROSCOPY AND <sup>1</sup> H RELAXOMETRY FOR A MULTI-SCALE INVESTIGATION OF INNOVATIVE MgO-BASED CEMENTS	<b>D. Cicero</b> – PLASMA PROTEIN BINDING OF DRUG CANDIDATES BY NMR
12:20-12:40	<b>F. Panattoni</b> - <sup>1</sup> H TIME-DOMAIN NMR ANALYSIS OF ELASTOMERIC NANOCOMPOSITES	<b>R. Marchetti</b> - NMR APPROACHES FOR THE STUDY OF THE INTERACTIONS BETWEEN HOST PROTEINS AND CELL SURFACE N-GLYCANS
12:40-13:10	<b>GIRM assembly</b>	
13:10-14:30	<b>Lunch</b>	
14:30-15:15	<b>Chair: A.M. D'Ursi</b> <b>Plenary Lecture 4</b> <b>T. Carlomagno</b> - INTEGRATIVE STRUCTURAL BIOLOGY OF RNP MACHINERY IN SOLUTION	
15:15-15:45	<b>Jeol Lecture</b> <b>A. Botana</b> - THE ROAD TO BETTER HFX EXPERIMENTS	
15:45-16:25	<b>Chair: D. Capitani</b> <b>Segre Fellowships 2016</b> <b>S. Bordignon</b> - 2D SOLID-STATE NMR EXPERIMENTS TO CHARACTERIZE THE HYDROGEN BOND NETWORK IN PHARMACEUTICAL COCRYSTALS <b>V. Mangini</b> – NMR-BASED APPROACHES FOR NANOTOXICITY ASSESSMENT: EFFECT OF SILVER NANOPARTICLES ON COPPER TRAFFICKING PROTEINS	
16:25-17:30	<b>Coffee break + Poster session</b>	
17:30-19:30	<b>GIDRM assembly + announcement of poster competition winner</b>	
20:30	<b>Social dinner</b>	

Friday September 29<sup>th</sup>

8:45-9:30	<b>Chair: M. Chierotti</b> <b>Plenary Lecture 5</b> <b>M. Edén</b> - LOW-POWER SYMMETRY-BASED HOMONUCLEAR DIPOLAR RECOUPLING: DESIGN, PRINCIPLES AND APPLICATIONS	
	<b>Parallel session A</b> <b>Chair: S. Mammi</b>	<b>Parallel session B</b> <b>Chair: M.P. D'Onofrio</b>
9:30-10:00	<b>A. Rotondo</b> - DATA MINING FROM NMR SPECTRA OF VEGETABLE OILS	<b>F. Arnesano</b> - EFFECT OF CISPLATIN ON THE COPPER-DEPENDENT INTERACTION BETWEEN ATOX1 AND MNK1
10:00-10:20	<b>P. G. Takis</b> - DEVELOPING METHODOLOGIES FOR THE EFFECTIVE NMR BASED METABOLOMICS ANALYSIS OF BIOFLUIDS	<b>F. Carniato</b> - STRUCTURAL FEATURES OF EU <sup>III</sup> -CONTAINING CRYPTATES THAT INFLUENCE RELAXIVITY
10:20-10:40	<b>A. Rizzuti</b> - COMBINATION OF NUCLEAR MAGNETIC RESONANCE AND HYPERSPECTRAL REFLECTANCE FOR THE IDENTIFICATION OF ERWINIA AMYLOVORA SP. INFECTED LEAVE	<b>D. Alberti</b> - A THERANOSTIC APPROACH FOR BORON NEUTRON CAPTURE THERAPY (BNCT) TREATMENT BASED ON THE USE OF Gd/B MULTIMODAL PROBES
10:40-11:10	<b>Coffee break</b>	
	<b>Parallel session A</b> <b>Chair: G. Pileio</b>	<b>Parallel session B</b> <b>Chair: T. Carlomagno</b>
11:10-11:40	<b>M. Halse</b> - HYPERPOLARISED LOW-FIELD NMR SPECTROSCOPY	<b>D. Picone</b> - PH INFLUENCE ON STRUCTURE AND STABILITY OF MNEI: A SWEET MODEL FOR PROTEIN FOLDING AND AGGREGATION STUDIES
11:40-12:00	<b>M. Tessari</b> - PARA-HYDROGEN HYPERPOLARIZATION FOR 1D AND 2D NMR CHEMICAL ANALYSIS AT SUB-MICROMOLAR CONCENTRATIONS	<b>L. Russo</b> - MECHANISTIC BASIS FOR THE RECOGNITION OF THE COACTIVATOR NCOA-1 BY STAT6
12:00-12:20	<b>E. Cavallari</b> - PARAHYDROGEN HYPERPOLARIZED METABOLITES FOR METABOLIC STUDIES ON BREAST CANCER CELLS	<b>V. Nasta</b> - STRUCTURAL INSIGHTS INTO THE MOLECULAR FUNCTION OF HUMAN [2Fe-2S] BOLA3-GRX5 AND [2Fe-2S] BOLA1-GRX5 COMPLEXES
12:20-12:35	<b>Chair: P. Turano</b> <b>Poster competition winner lecture</b>	
12:35-13:20	<b>Plenary Lecture 6</b> <b>T. Polenova</b> - INTEGRATIVE STRUCTURAL BIOLOGY OF BIOLOGICAL ASSEMBLIES: STRUCTURE AND DYNAMICS OF HIV-1 AND MICROTUBULE-ASSOCIATED PROTEIN ASSEMBLIES	
13:20-13:30	<b>Closing</b>	
13:30-15:00	<b>Lunch</b>	