

XLVI NATIONAL CONGRESS ON MAGNETIC RESONANCE

FISCIANO (SA) 27-29 SEPTEMBER 2017

SCIENTIFIC PROGRAM

Wednesday September 27th

10:00-13:00	Registration	
10:30-12:30	Bruker satellite meeting (registration starts at 10:00)	
12:45-14:00	Bruker Lunch	
14:00-14:30	Opening	
14:30-15:30	Chair: M. Geppi GIDRM/GIRM gold medal award A. Mele - MOLECULAR INTERACTIONS AND DYNAMICS AT A GLANCE: NMR AND BEYOND	
15:30-16:15	Plenary Lecture 1 H. Molinari - NMR STUDIES ON AMYLOID β PEPTIDES	
16:15-17:20	Coffee break + Poster session	
	Parallel session A Chair: D. Lurie	Parallel session B Chair: M. Edén
17:20-17:50	S. Geninatti Crich - RELAXOMETRY OF CANCER: EFFECT OF WATER MOBILITY AND MAGNETIC FIELD STRENGTH ON TISSUE AND CELL WATER PROTON T_1	P. Thureau - DNP-ENHANCED SOLID-STATE NMR FOR THE STUDY OF POWDERS AT NATURAL ISOTOPIC ABUNDANCE
17:50-18:10	D. Di Censo - MRI CHARACTERIZATION OF STRUCTURAL MODIFICATIONS IN STRIATUM OF PARKINSON'S DISEASE RAT MODEL	S. Sykora - THE UNBEARABLE FUZZINESS OF NMR DATA?
18:10-18:30	M. Tourell - PROBING THE LONG-TIME DIFFUSION LIMIT IN MACROPOROUS SPHERES PACKINGS VIA LONG LIVED SINGLET STATES	R. Spadaccini - DNP-SOLID-STATE NMR STUDIES ON THE ATP-DRIVEN LIPID FLIPPASE MsBA
18:30-18:50	M. Fantasia - NUMERICAL ANALYSIS OF THE NESTED BIRDCAGE RF COIL CONFIGURATION FOR $^1\text{H}/^{23}\text{Na}$ MRI AT 2.35 T AND WORKBENCH VALIDATION	E. M. Vasini - PCBC - A NOVEL AUTOMATIC PHASE & BASELINE CORRECTION ALGORITHM
18:50-19:35	Chair: L. Calucci Plenary Lecture 2 D. Sakellariou - COMPACT MAGNETIC RESONANCE: FRONTIERS AND CHALLENGES	

Thursday September 28th

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

Friday September 29th

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