

# Schedule for NMR Meets Biology 4 Dec 16-21, Khajuraho, India

COLOR CODES		Teaching	Research Talks	Hyperpolarisation Session	Special Session	Tutorials		
Time	16-Dec	17-Dec	18-Dec	19-Dec	20-Dec	21-Dec	Time	
before 08:30		BREAKFAST						before 08:30
08:30-09:30		<b>K. Ivanov</b> Introduction to NMR	<b>A. Bockmann</b> Sample preparation and sequential assignments in solid-state NMR	Free Time	<b>D. Huster</b> Order Parameters for studying membrane protein dynamics	<b>T. Prisner</b> Basic of EPR Spectroscopy	08:30-09:30	
09:30-9:45		COFFEE BREAK						09:30-9:45
09:45-11:15		<b>K. Ivanov</b> NMR Introduction Bloch and Solomon Equations	<b>M. Ernst / B. Meier</b> Superoperators, Introduction to Redfield Theory and the master equation	<b>B. Reif</b> Motional models for interpreting relaxation	<b>S. Bharathwaj</b> Using RDCs for understanding dynamics in solution NMR	<b>T. Prisner</b> Advances in EPR Spectroscopy	09:45-11:15	
11:15-11:30		COFFEE BREAK						11:15-11:30
11:30-13:00	Arrival	<b>K. Ivanov</b> BPP Theory	<b>M. Ernst / B. Meier</b> Master Equation (contd), Relaxation pathways	<b>P. Schanda</b> Solid-state NMR measurements of (bio-) molecular dynamics	<b>S. Bharathwaj</b> Tutorial RDC calculation and Interpretation	<b>Shimon Vega</b> Basis of Dynamic Nuclear Polarisation	11:30-13:00	
13:00-14:00		LUNCH						13:00-14:00
14:00-16:00		<b>P. Vallurupalli</b> Bloch McConnell Equations and their use in solution NMR	Free Day	<b>M. Ernst / B. Meier</b> Tutorial Relaxation Pathways	<b>P. Schanda</b> Tutorial Biomolecular Relaxation Data modelling	<b>K. Ivanov</b> Singlet-state NMR experiments with pairs of nearly equivalent nuclear spins	14:00-15:00	
						<b>S. Han</b> Developments in Dynamic Nuclear Polarisation		15:00-16:00
16:00-16:30		COFFEE BREAK						16:00-16:30
16:30-18:00	<b>P. K. Madhu</b> Introductory Talk 30 min	<b>Anja Bockmann</b> Solid state NMR investigations of hepatitis B virus structural proteins	Free Day	<b>Sujoy Mukherjee</b> NMR spin relaxation measurements and MD simulations reveal tuning of conformational entropy in oncogenic mutations of p53's DNA binding domain	<b>Tata Gopinath</b> Probing membrane protein ground and conformationally excited states using dipolar and J-coupling mediated MAS solid state NMR experiments	<b>G Rajalakshmi</b> Optical magnetometry techniques for low-field NMR	16:30-17:15	
		<b>Gopalswamy Mohanraj</b> Small molecule based targeting of AML1-ETO oligomerization as a potential strategy for anti-leukemia therapy		<b>Ashok Sekhar</b> Elucidating the mechanism of interaction of Hsp70 with client proteins	<b>V S Manu</b> Sensitivity enhancement via triply compensated pulses for high-field spectrometers			
	<b>B. Meier</b> Introductory Talk II	<b>Pramodh Vallurupalli</b> Studying conformational dynamics of proteins in the solution state		<b>Jeetender Chugh</b> Dynamical modes in RNA binding protein allow for shape-dependent RNA recognition	<b>S Bharathwaj</b> Influence of aromatic side-chains in biomolecular structure and dynamics			
		<b>Mandar Deshmukh</b> Small RNA mediated gene silencing in plants: Lessons for knockdown in gene therapeutics		<b>Venus Singh Mithu</b> Application of NMR spectroscopy in studying self-assembly and membrane interaction of amphiphilic ionic liquids	<b>Vinesh Vijayan</b> Structural basis for increased microtubule localisation of EB1 by GTP and SxIP			
						<b>J. Matysik</b> Photo-CIDNP in liquid and solid state	17:15-18:00	
	COFFEE BREAK			COFFEE BREAK				
18:10-19:40	<b>Vipin Agarwal</b> Solid state NMR method development at TIFR Hyderabad	<b>Harish Vashisth</b> Probing protein dynamics using NMR H/D exchange, and atomistic simulations	Special Session <b>Decoupling in solid state NMR; NMR of Quadrupolar nuclei; Biophysics of amyloids</b>			<b>Ashutosh Kumar</b> Structural basis of recognition between Plasmodium falciparum and Human sumoylation machinery	18:10-19:15	
	<b>Shobhana Kapoor</b> Biophysical insight into the role of membrane dynamics in diseases					<b>Gil Goobes</b> NMR study of biomaterials - From bone protein structure to minerals in mechanically different bones		<b>S. K. Upadhyay</b> Specific nucleic acid recognition sites by RNA binding proteins
	<b>Sponsor Talks: Sebastian</b>	<b>Bernd Reif</b> Protein aggregation investigated by NMR spectroscopy				<b>Neeraj Sinha</b> NMR Based Metabolomics Mirroring Heterogeneous Biology of Acute Respiratory Distress Syndrome (ARDS)		<b>Kaustubh R. Mote</b> A link between the DIPSHIFT and REDOR Experiments
						<b>Neel Bhavesh</b>		
19:40-onwards	DINNER						19:40-onwards	