<u>Agenda</u>

Monday, December 4

Registration	
10:30	Registration start & Welcome Coffee, IFJ PAN, Main Entrance (Radzikowskiego street), 1 st Floor

Welcome

11:30	<i>Opening</i> Prof. dr hab. Tadeusz Lesiak, Director IFJ PAN, Poland

1. Le	et's start! Chair: Susann Boretius, Gottingen, Germany
11:45 - 12:1	5 Jeff Bulte , Baltimore, USA Real-Time In Vivo Cytometry using MPI
12:15 - 12:4	5 Cornelius Faber , Münster, Germany Detecting inflammatory cell migration by MRI
12:45 – 13:15	Greg Stanisz, Toronto, Canada Metabolic MRI: is it useful or confusing?

13:15 - 14:30 Lunch, IFJ cantine

2.	Let's tak	e a look at organisms; Chair: Greg Stanisz, Toronto, Canada
14:30	- 15:00	Susann Boretius, Gottingen, Germany
		MRI in the common Marmoset - Bridge on the way from mouse to human.
15:00	- 15:30	Verena Hoerr, Bonn, Germany
		Cardiac CEST MRI to identify myocardial infarction
15:30	- 16:00	Harald Moeller, Leipzig, Germany
10.00	10100	Information on brain tissue microstructure obtained from MRI signal phase
16.00 -	- 16:30	Piotr Kozlowski, Vancouver, Canada
10.00		Modelling inhomogeneous magnetization transfer in myelin and intra-
		/extra-cellular water in normal and injured rat spinal cords ex vivo

16:30 - 17:00 Coffee Break, IFJ cantine

3. ¹ H and other nuclei; Chair: Ulrich Floegel, Dusseldorf, Germany		
17:00 - 17:30	Daniel Jirak, Prague, Czech Republic	
	Functional X-nuclei Magnetic Resonance (Reactive Oxygen Species	
	Detection)	
17:30 - 18:00	Peter Vermathen, Bern, Switzerland	
	In vivo Potassium MR-Spectroscopy at 7 T. Establishment and first	
	Applications in Human Muscle	
18:00 – 18: 20	Łukasz Boguszewicz, Gliwice, Poland	
10.00 10.20	1H NMR-based metabolomics in head and neck cancer treatment -	
	whether it may be helpful for a clinical?	
18:20 - 18:40	Igor Zhukov, Warsaw, Poland	
10.20 10.10	The application of 19F NMR spectroscopy in biomolecular studies as a	
	potent technique for structural analysis of the proteins and protein-protein	
	complexes in solution	
18:40 - 19:00	Radovan Jirik, Brno, Czech Republic	
	Perfusion MRI on small animals beyond K ^{trans}	

<u>Tuesday, December 5</u> IFJ PAN, Auditorium

Registration		
8:00	- 12:00	Registration, Auditorium Entrance, 1 st Floor
4.	Let's foo	cus on 19F; Chair: Daniel Jirak, Prague, Czech Republic
9:00	- 9:30	Francesca Baldelli Bombelli, Milan, Italy
0.00	0.00	Pivotal role of the protein corona on NP cellular uptake for boosting 19F-
		MRI sensitivity
9:30	- 10:00	Mitchell Albert, Thunder Bay, Canada
		Fluorine-19 Magnetic Resonance Imaging of the Lungs using
		Octafluorocyclobutane
9:30	- 10:00	Philipp Bochm-Sturm, Berlin, Germany
		A no brainer? 19F MR neuroimaging of cerebrovascular disease
10:00	- 10:30	Anton Windfelder, Giessen, Germany
		In vivo monitoring of gut inflammation in the insect larvae of Manduca
		sexta by 19F magnetic resonance imaging
10:30	- 11:00	Coffee Break

5. /	A bit of c	hemistry (and more); Chair: Mitchell Albert, Thunder Bay, Canada
11:00 -	- 11:30	Ulrich Floegel, Dusseldorf, Germany Molecular Imaging via 19F MRI
11:30 -	- 11:50	Robbin de Kruijf, Wageningen, The Netherlands
		The development and characterisation of an in vivo 19F MRI imaging agent
11:50 -	- 12:10	Monica Carril, Loioa, Spain Water Dispersible Small Nanoparticles with Fluorinated Surface and High
		Relaxation Times for 19F MR Applications
12:10 – 1	12:30	Tomasz Krawczyk , Gliwice, Poland Design Principles and Potential Applications of Molecular Hydrazone Switches for pH Imaging in 19F MRI
12:30 -	- 12:50	<i>Wilfried Reichardt</i> , Freiburg, Germany Tracking of immune cells using 19F MR imaging in a murine model of pancreatic cancer under therapy

13:00 - 14:30 Lunch, IFJ cantine

6.	A bit of imaging technics; Chair: Dominik von Elverfeldt, Freiburg, Germany		
14:30	- 14:50	Martin Pichotka, Freiburg, Germany	
		Photon-counting detectors in pre-clinical & μ CT – benefits and challenges	
14:50	- 15:10	Astrid Wietelmann, Bad Nauheim, Germany	
		T1 determination with rapid 2D Gradient Echo Imaging also applicable in	
		cardiac MRI	
15:10	- 15:30	Joanes Grandjean, Nijmegen, The Netherlands	
		Animal Imagers Unite! Lessons learned from working together and path	
		forward	
15:30	- 15:50	Marian Cholewa, Rzeszów, Poland,	
		Application of a deep learning-based analysis in magnetic resonance	
		elastography (MRE)	
15:50	- 16:10	Jochen Franke, Ettlingen, Germany	
		Magnetic Particle Imaging – one fascinating pillar of Bruker's multimodal	
		life science portfolio	
16:10	- 16:30	Claudia Oerther, Ettlingen, Germany,	
		Ensuring data quality, reliability, and reproducibility through Quality	

Assurance Procedures in Preclinical in (PET)/MR

16:30 - 17:00	Coffee Break
17:00 - 18:30	Poster Session
18:30	Transfer to the City Centre,
19:00 - 21:00	Conference Dinner, Krupnicza 20 street

Wednesday, December 6

IFJ PAN, Main Building, Auditorium

7.	Young re	esearchers also have a voice; Chair: Jens Waldeck, Ettlingen, Germany
9:00	- 9:10	<i>Karen Contreras-Muñoz</i> , Leioa, Spain Design of Smart Nanoprobes for 19F-MRIDetection of MMP-2/9 in Stroke,
9:10	- 9:20	Alvja Mali , Wageningen, The Netherlands Perfluorocarbon-PLGA particle ultrastructure affects pH sensitivity in 19F NMR and MRI
9:20	- 9:30	Natalia Jirát-Ziółkowska , Prague, Czech Republic Biocompatible Polymer for Real-Time ROS-triggered changes in 31P-MR and optical imaging
9:30	- 9:40	Nicolas Stumpe , Düsseldorf, Germany Non-invasive determination of oxygen partial pressure in ischemic tissue by 19F MR relaxometry
9:40	- 9:50	<i>Felix Schoknecht</i> , Berlin, Germany, 19F Magnetic Resonance Imaging in Experimental Subarachnoid Hemorrhage
9:50	- 10:00	<i>Silvester J. Bartsch</i> , Vienna, Austria Correlative multimodal biomarker identification of three breast cancer molecular subtypes: From image acquisition to machine-learning-based radiomics
10:00	- 10:10	<i>Kamil Lipiński</i> , Warsaw, Poland, Evaluation of Intra Voxel Incoherent Motion (IVIM) methodology in the context of perfusion clinical protocols
10:10	- 10:20	Zofia Schneider , Kraków, Poland DTI reveals age-related changes in brain gray matter in healthy young to middle-aged adults
10:20	- 10:30	Anna Krystyna Stefańska , Kraków, Poland, DTI studies of the Multiple Sclerosis influence on the Uncinate Fasciculus structure using the BSD-DTI

10:30 - 11:00	Coffee Break, IFJ cantine
---------------	---------------------------

8.	Local projects forum; Chair: Piotr Warszyński, Kraków, Poland	
11:00	- 11:20	Grzegorz Kwiatkowski, Kraków, Poland
		Quantitative assessment of coronary vascular permeability and oxidant stress using DCE MRI
11:20	- 11:40	Barbara Błasiak, Kraków, Poland
11.20	11.10	Core/shell nanoparticles for cancer detection in animal models using 9.4T
		MRI system
11.40	- 11:50	Juan Yang, Oslo, Norway
	11100	Synthesis and characterization of multifunctional nanoparticles for potential
		theranostic applications
11:50	- 12:00	Kamil Stachurski, Kraków, Poland
		Contrasting properties of hybrid nanosilica and cerium oxide nanoparticles
		for potential theranostic applications

12:00 - 12:10 Closing Remarks – Władysław Węglarz	9.	Closing	
	12:00	- 12:10	Closing Remarks – Władysław Węglarz

12:10	- 13:30	Lunch, IFJ cantine

10. Optiona	Optional – A bit of local history		
13:30 - 18:00	Wieliczka Salt Mine excursion		