2nd International Symposium on Precision Measurement Physics

Day 1 (February 26, Saturday): Plenary Session(M-425 Meeting Room)

Time	Speaker	Title	Chair
8:30—8:40	Zhiqiang Luo (APM)	Welcome speech	Xiaojun Liu (APM)
8:40-9:20	Jun Luo (SYSU, HUST)	The TianQin Project and its Progress	Chaohui Ye (APM)
9:20-10:00	Jianwei Pan (USTC)	Dream or Reality? Quantum Communication: the Past, Present and Beyond	
10:00-10:30	Coffee break		
10:30-11:10	Jiangfeng Du (USTC)	Searching for exotic spin dependent interactions by solid-state-spin quantum sensors	Jun Luo (SYSU,HUST)
11:10-11:50	Hongxing Xu (WHU)	Ultrasensing optical spectroscopy of plasmonic nanocavity	
11:50-14:00	Lunch		
14:00-14:40	Qingming Luo (HNU)	Optical Imaging for Brain-wide Mesoscale Connectome	Jiangfeng Du (USTC)
14:40-15:20	Heping Sun (APM)	Scientific significance of precision gravimetry and its future development	
15:20-15:50	Maili Liu (APM)	Biomolecular NMR Analysis	
15:50-16:05	Chaohui Ye (APM)	Remark	Xin Zhou (APM)

Day 1 (February 26, Saturday): Parallel Session-A(M-425 Meeting Room)

Time	Speaker	Title	Chair
16:20-16:40	Krzysztof Pachucki (University of Warsaw, Poland)	Testing fundamental interactions with few electron atoms and molecules	Li You (THU)
16:40-17:00	Akira Ozawa (MPQ, Germany)	Towards high-precision spectroscopy of He^+ using extreme-ultraviolet frequency combs	
00-17:20	Shuiming Hu (USTC)	Cavity-enhanced Precision Spectroscopy of Molecules	
17:20-17:40	Haibin Wu (ECNU)	Many-body physics of a Fermi gas in an optical cavity	
17:40-17:50	CAS cold atom Technology (Wuhan) Co., Ltd	Product presentation	

Day 2 (February 27, Sunday): Parallel Session-A(M-425 Meeting Room)

Time	Speaker	Title	Chair
8:30-8:50	Mingsheng Zhan (APM)	A Dual-Species Atom Platform for Quantum Test of Gravity and Quantum Computing	Zhengtian Lu (USTC)
8:50-9:10	Li You (THU)	Machine-designed nonlinear interferometer surpassing classical sensing limit	
9:10-9:30	Weiping Zhang (SJTU)	From coherence to quantum correlation: quantum-limit breaking laser interferometer	
9:30-9:50	Jing Zhang (SXU)	Atomic Bose-Einstein condensate in a twisted-bilayer optical lattice	
9:50-10:10	Zhongkun Hu (HUST)	Precision measurement with atom interferometer	
10:10-10:30	Coffee Break		
10:30-10:50	Peixiang Lu (HUST)	Precision measurement of transient processes using strong field-based ultrafast spectroscopy	Weiping Zhang (SJTU)

10:50-11:10	**Jing Chen (IAPCM)**	**Precise measurement of atomic and molecular dynamics**	
11:10-11:30	**Xiwen Guan (APM)**	**Quantum liquids in 1D: theory and experiment**	
11:30-11:50	**Xing Wu (University of Chicago)**	**Where is All the Anti-matter? Electron EDM Search in Cold Molecules Edges Closer**	
11:50-12:00	**Shanghai Precilasers Co., Ltd**	**High power wide wavelength single frequency fiber laser and laser system**	
12:00-14:00	**Lunch**		
14:00-14:20	**Shougang Zhang (NTSC)**	**Progress in the time and frequency measurement and transmission in NTSC**	**Jing Zhang (SXU)**
14:20-14:40	**Kelin Gao (APM)**	**Progress on $^{40}Ca^{+}$ optical atomic clocks**	
14:40-15:00	**Xuzong Chen (PKU)**	**Progress of ultracold atomic physics experiment on Chinese Space Station**	
15:00-15:20	**Fang Fang (NIM)**	**Current research on atomic clocks and their application**	
15:20-15:40	**Nikolai N. kolachevsky (P. N. Lebedev Physical Institute, Russia)**	**Thulium optical lattice clock**	
15:40-16:00	**Coffee Break**		
16:00-16:20	**Piet O. Schmidt (PTB, Braunschweig, Germany)**	**Highly charged ion optical clocks to test fundamental physics**	**Mingsheng Zhan (APM)**
16:20-16:40	**Ganghua Mei (APM)**	**Space Rubidium Atomic Clocks for BeiDou Satellite Navigation System**	
16:40-17:00	**Xinhua Peng (USTC)**	**Search for axion-like dark matter with quantum sensors**	
17:00-17:20	**Florian Ritterbusch (USTC)**	**Dating of water and ice by single atom counting of noble gas radioisotopes**	
17:20-17:40	**Shanqing Yang (SYSU)**	**Precise gravitational experiments**	
17:40-17:50	**Zhen Zhai, (IOP, CAS)**	**Introduction to Four Journals hosted by IOP**	

Day 1 (February 26, Saturday): Parallel Session-B(M-428 Meeting Room)

Time	Speaker	Title	Chair
16:20-16:40	Daiwen Yang (National University of Singapore)	Transient protein-membrane interactions and conformational exchange probed by NMR relaxation	Changwen Jin (PKU)
16:40-17:00	Bin Xia (PKU)	How bacterial xenogeneic silencers selectively recognize foreign DNA in the resident genome?	
17:00-17:20	Changlin Tian (USTC)	Fundamental properties analysis of ion channels: selectivity, gating and inactivation	
17:20-17:40	Huiru Tang (FUDAN)	Quantitative metabolomic phenomics for precision medicine to extend pioneers' trails	
17:40-17:50	Qiang Zhang (UNITED IMAGING)	Integrated innovation in industry-academy-research-utility: united imaging practices	

Day 2 (February 27, Sunday): Parallel Session-B(M-428 Meeting Room)

Time	Speaker	Title	Chair
08:30-08:50	Shangwu Ding (NSYSU)	A precise measurement platform for characterizing the physical, chemical and electrochemical properties of proton exchange membranes for fuel cells	Feng Deng (APM)
08:50-09:10	Guo-Wei Wei (MSU, USA)	Discovering the mechanisms of SARS-CoV-2 evolution and transmission	
09:10-9:30	Wei Wang (LZU)	Structure-performance relationship of covalent organic frameworks	
9:30-9:50	Riqiang Fu (NHMFL, USA)	Flip-angle selective profiles and their applications in NMR spectroscopy	
9:50-10:10	Zhehong Gan (NHMFL, USA)	The use of energy-level anti-crossing for ssNMR of quadrupolar nuclei	
10:10-10:30	Coffee Break		
10:30-10:50	Jinyuan Zhou (JHU, USA)	Protein-based amide proton transfer MRI principle, applications and standardization	Boqin Sun

10:50-11:10	**Xiaodong Zhang (Emory, USA)**	**Examining the temporal white matter alterations in the monkey brains with stroke and Huntington's disease using diffusion MRI at 3T**	**(Chevron)**
11:10-11:30	**Zhong Chen (XMU)**	**High-resolution NMR spectroscopy for complex samples in inhomogeneous magnetic fields**	
11:30-11:50	**Fuqiang Xu (APM, SIAT)**	**Progresses in the development, production, application & evaluation of viral vectors**	
11:50-12:00	**Yulin Liu (BRUKER)**	**Bruker BBIO in China-Progression & Innovation**	
12:00-14:00	**Lunch**		
14:00-14:20	**Pingchuan Sun (NKU)**	**Solid–state NMR characterization of polymers with dynamic bonds**	**Shangbin Liu (IAMS)**
14:20-14:40	**Jun Yang (APM)**	**Atomic-resolution dynamics of aquaporin Z in lipid bilayers revealed by magic angle spinning solid-state NMR spectroscopy**	
14:40-15:00	**Donghai Lin (XMU)**	**Studies on metabolic mechanisms of cancer cachexia by using integrated NMR-based metabolomics and transcriptomics**	
15:00-15:20	**Junfeng Wang (HMFL)**	**NMR-based protein design**	
15:20-15:40	**HongZhe Sun (HKU)**	**Metallomics and its an impact on biology and medicine**	
15:40-16:00	**Coffee Break**		
16:00-16:20	**Lizhi Xiao (CUP)**	**NMR for oil and gas exploration**	**Maili Liu (APM)**
16:20-16:40	**Jun Xu (APM)**	**Solid-state NMR spectroscopy of zeolite catalysis**	
16:40-17:00	**Xiaodong Yang (SIBET)**	**Research of high uniformity Halbach magnet for benchtop nuclear magnetic resonance**	
17:00-17:20	**Xin Zhou (APM)**	**Hyperpolarized 129Xe MRI and multi-nuclear molecular imaging**	