

Schedule of the XXIV. Linz Winter Workshop 2025

Friday, Jan. 31

19:00-23:00 **Get Together & Registration** **Sommerhaus Hotel Julius-Raab-Heim, Ground Floor**

Saturday, Feb. 1

08:00-08:45 **Registration** **Sommerhaus Hotel Julius-Raab-Heim, Ground Floor**

08:45-09:00 **Welcome / Opening** **Peter Hinterdorfer**
Johannes Kepler University Linz, Austria

Session I: High-Speed AFM

Chairman: Mervyn Miles

09:00-09:25	<i>Toshio Ando</i> Kanazawa University, Japan	1	Energy Transduction Mechanism in Walking Myosin V studied with Interactive High-speed AFM
09:25-09:50	<i>Simon Scheuring</i> Weill Cornell Medicine, USA	2	High-speed Atomic Force Microscopy for Structural Biology
09:50-10:05	<i>Varun Gupta</i> University of Leeds, UK	3	Visualizing toehold mediated DNA origami disassembly by High-Speed AFM
10:05-10:20	<i>Clemens M. Franz</i> Kanazawa University, Japan	4	Observing Dynamic Conformational Changes within the Coiled-Coil Domain of Different Laminin Isoforms Using High-Speed Atomic Force Microscopy
10:20-10:35	<i>Johannes Preiner</i> University of Applied Sciences Upper Austria, Austria	5	A mechanistic model of IgG oligomerization and complement activation

10:35-10:55 **Coffee Break & Exhibitions** **Sommerhaus Hotel Julius-Raab-Heim, Ground Floor**

Session II: Raman and Microwave Microscopy

Chairman: Gerhard Schütz

10:55-11:20	<i>Sabine Hild</i> Johannes Kepler University Linz, Austria	6	Characterization of biological macromolecules using Raman Spectroscopy
11:20-11:35	<i>Naresh Kumar</i> ETH Zürich, Switzerland	7	Nanoscale Chemical Characterization of Supported Lipid Membranes using Tip-Enhanced Raman Spectroscopy
11:35-11:50	<i>Georg Gramse</i> Johannes Kepler University Linz, Austria	8	Electrochemical Microwave Microscopy for the studying the electrical dynamics at the solid electrolyte interface
11:50-12:05	<i>Eric Lesniewska</i> University of Bourgogne, France	9	Microwave and IR-Based Techniques for Analysing Molecular Signatures: A Novel Approach to Biomarker Detection
12:05-12:20	<i>Leon Hütsch</i> Oxford Instruments GmbH	10	<i>Platinum sponsor talk</i> Vero, the first Interferometric AFM from Oxford Instruments

12:20-13:45 **Lunch & Exhibitions** **Sommerhaus Hotel Julius-Raab-Heim, Ground Floor**

Session III: Nano-Virology

Chairman: Ulrich Keyser

13:45-14:10	<i>Wouter H. Roos</i> University of Groningen, Netherlands	11	Nanoscale dynamics of biomolecular interactions: from viruses to antibiotics
14:10-14:25	<i>Yohei Yamauch</i> ETH Zürich, Switzerland	12	Enhanced Visualization of Influenza A Virus Cell Entry Using Live Virus-View Atomic Force Microscopy (ViViD-AFM)
14:25-14:50	<i>Dibyendu Kumar Das</i> IIT Kanpur, India	13	Single molecule imaging of Coronavirus spike trimers conformational dynamics in membrane during entry
14:50-16:15	Poster Session I Coffee Break & Exhibitions		Sommerhaus Hotel Julius-Raab-Heim, Ground Floor

Session IV: Nucleotide and Protein Nanodynamics

Chairman: Ricardo Garcia

16:15-16:40	<i>Ulrich Keyser</i> Cambridge University, UK	14	Nanopore microscopy for imaging DNA and RNA nanostructures
16:40-16:55	<i>Roland Bennowitz</i> INM Leibniz, Germany	15	Single-Polymer Force Microscopy of dsDNA Interacting with a Nanoporous Membrane
16:55-17:10	<i>Miklós Kellermayer</i> Semmelweis University, Hungary	16	Nanomechanics of porphyrin-bound DNA
17:10-17:35	<i>Dave Thirumalai</i> University of Texas, USA	17	Motor driven Genome Folding at the Single Molecule Level
17:35-18:00	<i>Sonja Schmid</i> University of Basel, Switzerland	18	The Timing of Life at the Nanoscale – New Tools for New Insights
19:00-23:00	Conference Dinner		Altes Rathaus / Gemeinderatssaal (on Mainsquare / Hauptplatz 1-5)

Sunday, Feb. 2

Session V: Mechanotransduction and Nanomechanics

Chairman: Thomas Schmidt

09:00-09:25	<i>Hanna Engelke</i> University of Graz, Austria	19	Cell-Matrix Interactions – from fibers to mechanotransduction
09:25-09:50	<i>Cheng Zhu</i> Georgia Institute of Technology and Emory University, USA	20	Mechanotransduction through immunoreceptors
09:50-10:15	<i>Ricardo Garcia</i> CSIC Madrid, Spain	21	Frontiers in Nanomechanics: From Proteins to Cells
10:15-10:40	<i>Anne-Sophie Duwez</i> University of Liege, Belgium	22	Interrogating synthetic molecular motors with single-molecule force spectroscopy
10:40-11:00	Coffee Break & Exhibitions		Sommerhaus Hotel Julius-Raab-Heim, Ground Floor

Session VI: Cellular and Molecular Binding Mechanisms

Chairman: Anne-Sophie Duwez

11:00-11:15	<i>Mitchel J. Doktycz</i> Oak Ridge National Laboratory, USA	23	Understanding microbial adhesion to surfaces by AFM
11:15-11:30	<i>Samer Alokaidi</i> Saarland University, Germany	24	Patchy Adhesion of Staphylococcus aureus on Structured Surfaces Uncovered via Single Cell Force Spectroscopy
11:30-11:45	<i>Carolina Borrelli</i> University College London, UK	25	Resolving outer membrane organization of living Escherichia coli and its disruption by antibiotics
11:45-12:00	<i>Dina Grohmann</i> University Regensburg, Germany	26	DNA origami-based single-molecule force spectroscopy advances the molecular understanding of transcription initiation
12:00-12:15	<i>Rong Zhu</i> Johannes Kepler University Linz, Austria	27	Revealing the location and dynamics of a concealed binding site in the dopamine transporter
12:15-12:30	<i>Melanie Koehler</i> Leibniz Institute for Food Systems Biology, Germany	28	Maximizing Flavor: Leveraging Nano-biophysical Methods in Food Perception and Formulation Research
12:30-13:45	Lunch & Exhibitions		Sommerhaus Hotel Julius-Raab-Heim, Ground Floor

Session VII: Advances in Scanning Probe Microscopy

Chairman: Georg Fantner

13:45-14:10	<i>Franz J. Giessibl</i> University of Regensburg, Germany	29	Probing soft matter with the hard qPlus sensor – a crazy idea?
14:10-14:25	<i>M.J. Miles</i> Bristol University, UK	30	Vertical Probe Force Microscopy for Biomolecules
14:25-14:50	<i>Takeshi Fukuma</i> Kanazawa University, Japan	31	Nanoscale Measurements of Dynamics and Mechanics inside Living Cells by Nanoendoscopy AFM
14:50-15:15	<i>Mingdong Dong</i> Aarhus University, Denmark	32	Atomic-Scale Frictional Properties of 2D Materials Investigated Using Atomic Force Microscopy
15:15-16:35	Poster Session II Coffee Break & Exhibitions		Sommerhaus Hotel Julius-Raab-Heim, Ground Floor

Session VIII: Correlative Imaging

Chairman: Eric Lesniewska

16:35-17:00	<i>Georg E. Fantner</i> EPFL, Switzerland	33	CLEAM – Correlative Light/Electron/Atomic-Force Microscopy
17:00-17:15	<i>Costa Luca</i> Montpellier University, France	34	Correlative Fluorescence-AFM for probing Biomolecular Condensates
17:15-17:30	<i>Simon Jaritz</i> TU Vienna, Austria	35	A correlative study using single molecule localization microscopy and atomic force microscopy of collagen fibers
17:30-17:45	<i>Alexander Klasen</i> Park Systems, Germany	36	Platinum sponsor talk Investigating Correlative Properties of Soft Materials with SPM
17:45-18:00	<i>Wolfgang Schwinger,</i> Carl Zeiss GmbH, Austria	37	Sponsor talk Of-the-Shelf Solutions in Electron- & X-Ray Microscopy from ZEISS

19:00-23:00

Conference Dinner
in Cider Press House Freiseder

Buses depart in front of the Sommerhaus Hotel at 18:40
Boarding starts at 18:30, return of first bus 22:00

Monday, Feb. 3

Session IX: Biomaterials and Bioinformatics

Chairman: Malgorzata Lekka

09:00-09:25	<i>Igor Sokolov</i> Tufts University, USA	38	OuterOmics with SPM/AFM and AI: the Birth of a New Area of Bioinformatics?
09:25-09:50	<i>Philippe Leclere</i> University of Mons, Belgium	39	Towards Quantitative Mapping of Mechanical Properties of Soft Materials: When AI Meets Materials
09:50-10:05	<i>Yoonhee Lee</i> DGIST, Republic of Korea	40	Exploring Nanomechanical Properties and AI-Based Classification of NSCLC Extracellular Vesicles
10:05-10:20	<i>Jaime R. Tejedor</i> CSIC, Spain	41	High-Throughput Nanorheology of Living Cells Powered by Supervised Machine Learning
10:20-10:35	<i>Bart W. Hoogenboom</i> Nanosurf AG, Switzerland	42	<i>Platinum Sponsor Talk</i> Shake it with light: the fast, the fit and the fancy of photothermally actuated atomic force microscopy

10:35-10:50

Coffee Break & Exhibitions

Sommerhotel Julius-Raab-Heim, Ground Floor

Session X: Nanomechanics and Microprinting

Chairman: Philip Leclere

10:50-11:15	<i>Malgorzata Lekka</i> Institute of Nuclear Physics PAN, Poland	43	From Nanomechanics to viscoelasticity in the metastatic potential of cancer cells
11:15-11:40	<i>Christine Selhuber-Unkel</i> Univ. Heidelberg, Germany	44	Engineering the Cellular Microenvironment: In Situ Control of Cell Migration and Adhesion
11:40-11:55	<i>Thomas Schmidt</i> University Leiden, Germany	45	Altered Mechanobiology of PDAC Cells with Acquired Chemoresistance to Gemcitabine and Paclitaxel.
11:55-12:10	<i>Thomas A. Klar</i> Johannes Kepler University Linz, Austria	46	Sub-diffraction optical lithography beyond acrylates
12:10-12:25	<i>Robert Magerle</i> Technische Universität Chemnitz, Germany	47	Nanomechanical ultrastructure of native tendon tissue
12:25-12:40	<i>Gregory Timp</i> University of Notre Dame, USA	48	Silicon Nanotechnology for Single Molecule and Single Cell Biology

12:40-14:00

Lunch & Exhibitions

Sommerhotel Julius-Raab-Heim, Ground Floor

Session XI: Nanobiophysics

Chairman: Igor Sokoloff

14:00-14:15	<i>Hannah Seferovic</i> Johannes Kepler University Linz, Austria	49	Nanomechanical binding mechanics of ligands drives agonistic activity
14:15-14:30	<i>Shiva Patil</i> Indian Institute of Science Education and Research, India	50	Soft Glassy Rheology of single cells using AFM and pathogenic aggregates
14:30-14:45	<i>Sanket Jugade</i> Indian Insitute of Science, India	51	Solid-like behaviour of Confined Water in Graphene-Liquid Cells

14:45-15:00	<i>Émilie Cenraud</i> CNRS, France	52	Biophysical Characterization of Phages for Integration into Antimicrobial polymer matrices: Towards Prophylactic Applications Against <i>Staphylococcus aureus</i> .
15:00-15:15	<i>Fanny Duhalde</i> Centre de Recherche Saint-Antoine, France	53	Dynamics of Matrix Vesicles-induced mineralization in osteoarthritis
15:15-15:30	<i>Karin Kornmueller</i> Medical University of Graz, Austria	54	Tracing Low Density Lipoprotein Aggregation: OF2i as a Breakthrough Analytical Tool
15:30-15:45	Coffee Break & Exhibitions		Sommerhotel Julius-Raab-Heim, Ground Floor

Session XII: Channels and Receptors

Chairman: Peter Pohl

15:45-16:00	<i>Haoqing Jerry Wang</i> University of Sydney, Australia	55	Microscale geometrical modulation of PIEZO1 mediated mechanosensing through cytoskeletal and tension redistribution
16:00-16:15	<i>Rohit Yadav</i> Johannes Kepler University Linz, Austria	56	Photomodulation of Kv Channel Activity
16:15-16:30	<i>Barbora Kalousková</i> TU Wien, Austria	57	Understanding the nanoscale organization of natural killer cell receptors NKp30 at the single-molecule level
16:30-16:45	<i>Birgit Plochberger</i> University of Applied Sciences Upper Austria, Austria	58	The interaction between TTYH2 and ApoE promotes lipid transfer
16:45-17:00	<i>Mengjia Xu</i> ETH Zurich, Switzerland	59	Patch-Clamp with Fluid FM
17:00-17:15	<i>Ekaterina Zorikova</i> Weizmann Institute of Science, Israel	60	Monitoring Mitochondrial Bioenergetics and Physical Properties Using Atomic Force Microscopy

Poster Sessions

Saturday, Feb. 1 (odd numbers presenting)

Sunday, Feb. 2 (even numbers presenting)

Authors	Number	Title
1 – Scanning Probe Microscopy Imaging		
<u>Ronnie Willaert</u> , Charlotte Yvanoff, Azra Melkic, Sandor Kasas <i>Vrije Universiteit Brussels, Belgium</i>	1	Real-Time Observation of Topoisomerase II α Dynamics on Supercoiled Plasmid DNA Using Fast-Scan Atomic Force Microscopy
<u>Meritxell Moreno Córdoba</u> , Charlotte Yvanoff, Ines Villalba, Sandor Kasas, Ronnie G. Willaert <i>Vrije Universiteit Brussels, Belgium</i>	2	<i>Komagateibacter rhaeticus</i> cellulose production characterization through atomic force microscopy
<u>Maryam Marefat</u> , Andreas Karner, Martina Hofmann, Tina Karimian, Christine Siligan, Sandra Posch, Andreas Horner, Peter Lanzerstorfer, Johannes Preiner <i>University of Applied Sciences Upper Austria, Austria</i>	3	Insights on IgG oligomer mediated Fc Receptor clustering
<u>Dimitry Sivun</u> , Christoph Naderer, Babara Kroenigsberger, Jaroslav Jacak <i>University of Applied Sciences Upper Austria, Austria</i>	4	Functional nanostructures for EVs immobilization
<u>María Inés Villalba</u> , Tianqi Zhang, Urs von Guntena, Ronnie Willaert, Sandor Kasas <i>EPFL, Lausanne, Switzerland</i>	5	AFM measurements on sporulated and vegetative <i>Bacillus subtilis</i>
<u>Jürgen Strasser</u> , Tereza Kadavá, Albert JR Heck, Johannes Preiner <i>University of Applied Sciences Upper Austria, Austria</i>	6	Elusive Spiders in our Blood – Exploring C4BP Subunit Arrangements and Protein Interactions via High-Speed AFM
Martin Dehnert, <u>Tiberius Klose</u> , Yong Pan, Dietrich R. T. Zahn, Maximilian Voigtländer, Johannes F. Teichert, Robert Magerle <i>Technische Universität Chemnitz, Germany</i>	7	Triacylglycerols affect the water content and cohesive strength of collagen fibers
<u>M. Csilla Csányi</u> , Richárd Csekő, Tímea Feller, Miklós Kellermayer <i>Semmelweis University, Hungary</i>	8	The addition of detergents facilitates the epitaxial growth of amyloid fibrils on the mica surface
<u>Balint Kiss</u> , Luca Elizabet Kosik, Miklos Cervenak, Dominik Sziklai, Souma Yamamoto, Hiroki Konno, Hedvig Tordai, Miklós Kellermayer <i>Semmelweis University, Hungary</i>	9	Internal Dynamics of T7 bacteriophage Target Receptors
<u>Lena Neubauer</u> , Martina Failla, Jérôme Doss, Guillaume Andrieu, Bernhard Lendl, Georg Ramer, Ariane Deniset-Besseau <i>TU Vienna, Austria</i>	10	Investigation at the nanoscale of membrane lipids peroxidation in T-cells using AFM-IR
<u>Margaux Petay</u> , Magdalena Fuchs, Orestis G. Andriotis, Anxhela Docaj, Alessandra Carriero, Philipp J. Thurner, Bernhard Lendl, Georg Ramer <i>TU Vienna, Austria</i>	11	Exploring collagen fibrils intramolecular cross-linking through AFM-IR analysis
<u>Ádam Zolcsák</u> , Bálint Kiss, Tamás Bozó, Judit Somkuti, Vona István, Miklós Kellermayer, Levente Herenyi <i>Semmelweis University, Hungary</i>	12	Nanostructural and nanomechanical alterations of photosensitizer-containing lipid membranes due to light-induced formation of reactive oxygen species
<u>Marina Wiesenfarth</u> , Julia Benthin, Sanjai Karanth, Melanie Koehler <i>Leibniz Institute for Food Systems Biology, Germany</i>	13	Beyond Taste: Unveiling the Multisensory Sensation of Creamy Mouthfeel in Dairy by synergizing Biophysical, Molecular and food Biology Approaches
<u>Maxwell Sparey</u> , Hannah Severovic, Gianluca Fabi, Michael Leitner, José Huertas, Ahmad Azizpour, Georg Gramse <i>Johannes Kepler University Linz, Austria</i>	14	Shear Force Microwave Microscopy: Complex impedance imaging, and Single Entity Electrochemistry

J. Wizani, M. Nemeth, L. Ebner, Hanneschläger G., B. Heise, I. Alic, A. Ebner, <u>M. Leitner</u> <i>Johannes Kepler University Linz, Austria</i>	15	Optical Coherence Tomography for Guiding an Atomic Force Microscope in Turbid Liquids
<u>A. Marauri</u> , C. Marcuello, F. Auria-Luna, J. Molina-Canteras, A. Larumbe, M. Alosa-Mariño, I. Rivilla, A. Colom, F. P. Cossio <i>University of the Basque Country, Spain</i>	16	Characterization of a fluorescent bicolour indicator in solid state by AFM
<u>Yiwei Zheng</u> , Fang Jiao, Georg Fantner <i>EPFL, Lausanne, Switzerland</i>	17	Influence of Internal and External Influences on the Peptide Assemblies Revealed by Atomic Force Microscopy
Ian Addison-Smith, Willy Menacho, <u>Horacio V. Guzman</u> <i>Materials Science Institute of Barcelona, Spain</i>	18	Unmasking biomacromolecular conformational dynamics from AFM images with dynamic modes and molecular kinetics models
Antonio M. Bosch, Rubén Pérez, <u>Horacio V. Guzman</u> <i>Materials Science Institute of Barcelona, Spain</i>	19	Fine Tuning the RBD Protein Flexibility at Material Interfaces

2 – Force Mapping and Spectroscopy

<u>Hans Gunstheimer</u> , Gotthold Fläschner, Jonathan D. Adams, Hendrik Hölscher, Bard Hoogenboom <i>Nanosurf AG, Switzerland</i>	20	Fast and quantitative nanomechanical mapping using photothermal off-resonance tapping atomic force microscopy (AFM)
<u>Adrien Roulez</u> , Hai Qian, Anne-Sophie Duwez <i>University of Liège, Belgium</i>	21	Isomerization and covalent bond rupture of two hydrazone-based mechanophores by using single-molecule force spectroscopy
<u>Alexandre Bastin</u> , Hai Qian, Anne-Sophie Duwez <i>University of Liège, Belgium</i>	22	Investigating the Impact of a Cyclic Pulling Geometry on the Mechanical Reactivity of Anthracene-Maleimide Mechanophores by Single-Molecule Force Spectroscopy
<u>Charlotte Yvanoff</u> , Mohammad Shahidul Alam, Mohammad Mubarak Hosain, Sandor Kasas, Takeshi Fukuma, Ronnie Willaert <i>Vrije Universiteit Brussels, Belgium</i>	23	3D Nanoendoscopy-AFM: Redefining Mechanosensitivity in Bone Cells
<u>Yan Fett</u> , Sukanya Das, Roland Bennewitz <i>INM-Leibniz, Germany</i>	24	Categorization of single-polymer force spectroscopy curves by machine learning
<u>Christina M. Sulea</u> , Benedek Nagy, Dominik Sziklai, Bence Ágg, Miklós Pólos, Kálmán Benke, Zoltán Szabolcs, Miklós Kellermayer <i>Semmelweis University, Hungary</i>	25	Nanomechanics of fibrillin microfibrils in Marfan syndrom
<u>Sanjai Karanth</u> , Marina Wiesenfarth, Julia Benthin, Melanie Koehler <i>Leibniz Institute for Food Systems Biology, Germany</i>	26	Plant-based Functional Amyloids Modulate Cell Membrane Interfaces for Biomolecular Interactions and its Implications for Food Texture Perception as unveiled by Atomic Force Microscopy
Thomas Fuhs, Alexander Dulebo, Joan-Carles Escolano, Thomas Henze, <u>Heiko Haschke</u> <i>Bruker Nano Surfaces, Germany</i>	27	Enhancing Large-Scale BioAFM Mechanical Characterization with SmartMapping
<u>Begüm Dikecoglu</u> , Paul Valita, <u>Sarah Stainer</u> , Gerald B. Pier, Peter Hinterdorfer <i>Johannes Kepler University Linz, Austria</i>	28	Single-Molecular binding studies of therapeutic antibodies to microbial polysaccharides
<u>Jordan Turney</u> , Kadie Edwards, Lydia Powell, Andre Koering, Torsten Müller, Heiko Haschke, Paul Rees, Huw Summers, Lewis Francis <i>Swansea University, UK</i>	29	Understanding cancer aggregate migration; utilising Bio-AFM, biomechanics and molecular biology at the peritoneal boundary
<u>Mila Krafft</u> , Wouter H. Roos <i>Rijksuniversiteit Groningen, Netherlands</i>	30	Viral Nanomechanics and Nanodynamics
<u>Justyna Śmiątek-Bartyzel</u> , Małgorzata Lekka <i>IFJ PAN, Poland</i>	31	Nanomechanical adaptation of single cells to altered intrinsic and extrinsic cues
<u>Anthony Bevitch</u> , Thomas Carabin, Guillaume De Bo, Anne-Sophie Duwez <i>Université de Liège, Belgium</i>	32	Investigating the Mechanical Reversibility of Furane-Maleimide Diels-Alder Adducts

3 – Optical Microscopy and Spectroscopy

Ines Villalba, Charlotte Yvanoff, Vjera Radonicic, Mertixell Moreno Córdoba, Ronnie Willaert, <u>Sandor Kasas</u> <i>EPFL Lausanne, Switzerland</i>	33	AFM and optical microscopy based nanomotion detection techniques and applications
<u>Matthias Paul</u> , Barbora Kalouskova, Gerhard Schütz, Mario Brameshuber <i>TU Wien, Austria</i>	34	Enhancing Fluorescence Microscopy by using photostable EGFP variants
<u>Anushree Dutta</u> , Siiri Bienz, Naresh Kumar, Renato Zenobi <i>ETH Zurich, Switzerland</i>	35	Detection and Nanoscale Chemical Imaging of Nanoplastics by Optical Nano-Spectroscopy
<u>Vjera Radonicic</u> , Ines Villalba, Bart Devreese, Sandor Kasas, Ronnie Willaert <i>Vrije Universiteit Brussel, Belgium</i>	36	Optical nanomotion detection as a rapid antimicrobial susceptibility testing method for fighting microbial infections in long-duration space missions
<u>Markus Axmann</u> , Florian Weber, Erdinc Szegin, Mariana Amaro, Taras Sych, Armin Horchreiner, Martin Hof, Gerhard J. Schütz, Herbert Stangl, Birgit Blochberger <i>University of Applied Sciences Upper Austria, Austria</i>	37	“Head-to-Toe” Lipid Properties Govern the Binding and Cargo Transfer of High-Density Lipoprotein
<u>Meisam Sadeghpour Karimi</u> , Gabriele Ferrini <i>I-LAMP Brescia, Italy</i>	38	Optical Scanning Microscopy with Dielectric Microsphere
<u>Lisa Hain</u> , Martin Strnad, Marie Vancová, Ryan O. M. Rego, Peter Hinterdorfer, Yoo Jin Oh <i>Johannes Kepler University Linz, Austria</i>	39	Exploring the Interaction between <i>Borrelia</i> and Endothelial Cells
<u>Purba Pahari</u> , Dibyendu Kumar Das <i>India Institute of Technology Kanpur, India</i>	40	Direct visualization of refolding dynamics of SARS-CoV-2 spike trimer in membrane
<u>Sandra Posch</u> , Christian Angerer, Felix Wolkenstein, Bettina Gahleitner, Anna Stoib, Christine Siligan, Nikolaus Gössweiner-Mohr, Verena Karl, Sabine Hild, Andreas Horner <i>Johannes Kepler University Linz, Austria</i>	41	Take a “peak” into Raman Spectroscopy on the pH-gated bacterial urea channel HpUrel
<u>Manoj Prasad</u> , Hongyu Shao, Ashley Cadby, David Strutt <i>The University of Sheffield, UK</i>	42	Quantifying the stoichiometry of protein complexes using the stepwise fluorescent bleaching method
<u>Gerd Behme</u> <i>Ox, Germany</i>	43	Brillouin Microscopy: A Tool for 3D Imaging in Mechanobiology
<u>Roman Dekhtiarenko</u> , Juraj Kristofcak, Zuzana Sevcikova Tomaskova <i>Slovak Academy of Sciences, Bratislava</i>	44	Possible interaction of mitochondrial translocator protein with chloride intracellular channel CLIC5

4 – Nano-Biophysics

Andrea Benkovic, Madalena Branco, Christian Neuper, Lisa Theiss, Maximilian Illek, Ivan Vidakovic, Robert Reimer, Sarah Stainer, Tamás Földes, Doris Auer, Gerd Leitinger, Peter Hinterdorfer, Ambroise Desfosses, Christain Hill, Judith Peters, <u>Karin Kornmueller</u> <i>Medical University of Graz, Austria</i>	45	Tracing Low Density Lipoprotein Aggregation: OF2i as a Breakthrough Analytical Tool
<u>Magdalena Branco</u> , Andrea Benkovic, Lisa Theiss, Maximilian Illek, Tamás Földes, Ambroise Desfosses, Karin Kornmueller, Judith Peters <i>University of Grenoble Alpes (UGA), France</i>	46	Structural Investigation of Human Low Density Lipoprotein
<u>Jakub Mroz</u> , Mateusz Sikora <i>Jagiellonian University, Poland</i>	47	Exploring the dual role of CFTR palmitoylation through multiscale simulations
<u>Nurdan Cocuk</u> , Yuhang Wu, Junghyun Lee, Quintin Baugh, David C. Martin <i>University of Delaware, USA</i>	48	Electrochemical and Morphological Properties of PEDOT with Boron-Containing Dopants
<u>Simon Straußgschwandtner</u> <i>Johannes Kepler University Linz, Austria</i>	49	Activating the Mechanosensitive Ion Channel TRAAK by Light.

- Adriana P. C. Sánchez, Bruno Lartiges, Cécile Formosa-Dague
Toulouse Biotechnology Institute, France 50 Investigating the influence of pH on the hydrophobic surface properties of *Chlorella vulgaris* to optimize microalgae harvesting in microfluidic systems
- Anna Fučíková, Tereza Svatonova
Charles University, Czech Republic 51 Nano-topographical changes in fingerprint due to degradation in time studied by Atomic force microscopy-option to set a timeline?
- Nora Andrea Hagleitner-Ertugrul, Ferdinand Horvath, Laura Nübl, Nikolaus Goessweiner-Mohr, Christine Siligan, Denis G. Knyazev; Peter Pohl
Johannes Kepler University Linz, Austria 52 Regulation of the Bacterial Translocon SecYeg by Proton Motive Force (PMF)