

## Agenda for the Satellite Workshop: Lighting up Mass Spectrometry – Structural investigations of biological systems @UM 2022

TUESDAY 25 JANUARY 2022 FROM 09:30 – 17:30 CET

|             |                                                                                                                                                 |                                                                  |                              |
|-------------|-------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------|------------------------------|
| 09:30-09:35 | Welcome                                                                                                                                         | Kristina Lorenzen (European XFEL)                                | Chair:<br>Kristina Lorenzen  |
| 09:35-10:20 | Keynote: Single Particle Flash X-ray Imaging - past, present and future                                                                         | Filipe Maia (Uppsala University)                                 |                              |
| 10:20-10:35 | Overview MS SPIDOC                                                                                                                              | Charlotte Uetrecht (University of Siegen/CSSB)                   |                              |
| 10:35-11:05 | MS SPIDOC setup                                                                                                                                 | Alan Kádek (BIOCEV, Czech Academy of Sciences)                   |                              |
| 11:05-11:30 | Industrial MS SPIDOC partner                                                                                                                    | Jan Commandeur (MS VISION)                                       |                              |
| 11:30-11:50 | <i>Coffee break</i>                                                                                                                             |                                                                  |                              |
| 11:50-12:15 | COMOTION                                                                                                                                        | Jochen Küpper / Amit Samanta (CFEL)                              | Chair:<br>Charlotte Uetrecht |
| 12:15-12:40 | Soft X-ray absorption spectroscopy of biomolecules                                                                                              | Sadia Bari (DESY)                                                |                              |
| 12:40-13:05 | Exploring the Ultra-Fast Relaxation and Fragmentation of Polycyclic Aromatic Hydrocarbons using ultrafast pump-probe spectroscopy at FLASH      | Melanie Schnell (DESY)                                           |                              |
| 13:05-14:15 | <i>Lunch break</i>                                                                                                                              |                                                                  |                              |
| 14:15-14:40 | Understanding, probing and controlling neurodegeneration: novel advances in hyphenated Mass Spectrometry                                        | Anouk Rijs (VU Amsterdam)                                        | Chair:<br>Alan Kádek         |
| 14:40-15:05 | Sugars in the Gas Phase – Novel Techniques to Unravel the Glycocode                                                                             | Kevin Pagel (FU Berlin)                                          |                              |
| 15:05-15:30 | Rehydrating gas-phase protein structures – can we recover solution structures?                                                                  | Maxim Brodmerkel (Uppsala University)                            |                              |
| 15:30-15:55 | Irradiation of isolated DNA strands                                                                                                             | Min Liu (Jean Christophe Pouilly lab), Université Caen Normandie |                              |
| 15:55-16:25 | <i>Coffee break</i>                                                                                                                             |                                                                  |                              |
| 16:25-16:50 | Characterizing Structures of Multimeric Protein Complexes Using Collision-induced Unfolding and Ultraviolet Photodissociation Mass Spectrometry | Jennifer S. Brodbelt (University of Texas at Austin)             | Chair:<br>Thomas Kierspel    |
| 16:50-17:15 | SPI efforts at LCLS and the TXI instrument                                                                                                      | Andy Aquila (Stanford University)                                |                              |
| 17:15-17:30 | Discussion/Closure                                                                                                                              | Kristina Lorenzen (European XFEL)                                |                              |