

Spectroswiss equips FTMS end-users with advanced data acquisition and data processing tools to increase productivity and performance of their FTMS instruments.

The 2017 Innovations from Spectroswiss



FTMS Booster X2: Advanced FTMS Data Acquisition

- Works in parallel with any FTMS data acquisition systems
 - Acquires and stores high-quality **transients** (FTMS raw data)
 - Maximum sensitivity via unique **adaptive gain control** function
 - **Phased transients** for absorption mode Fourier transform
 - Practically unlimited size datasets with maximized **duty cycles**
 - Advanced diagnostics of Orbitrap™ and ICR FTMS instruments
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Peak by Peak: Advanced FTMS Data Processing

- Tailored workflows (graphic user interface) for advanced FTMS data processing leverage applications in: petroleomics, shotgun lipidomics, imaging, multiplexed quantitative proteomics, top-down, UV/IR spectroscopy, and for user-defined applications
 - Seamless processing of .RAW files, .d folders, and .HDF5 files
 - Output file formats: TXT, HDF5, MGF, mzXML, mzML, imzML
 - Handling of (very) large datasets of transients and mass spectra
 - Baseline correction, noise thresholding, peak picking, calibration
 - GPU-driven least-squares fitting (LSF) for real-life applications
 - Cross-platform code: Windows and Linux systems are supported
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Spectroswiss science and technology at the **2017 ASMS Conference**, Indianapolis:

1. **Monday June 4**, talk MOG at 10:10, Room 101-106: Kozhinov et al., «**Novel data acquisition approaches for enhanced ion detection in FTMS instruments**»
2. **Monday June 4**, poster MP 163: Albrieux et al., «**Molecular characterization of heavy petroleum products using data processing-enhanced 7 T LTQ FT-ICR MS**»
3. **Tuesday June 5**, talk TOG at 09:50, Room 101-106: Nagornov et al., «**Phase-coherent ion dispersion in non-linear electric fields enables FT-ICR MS at cyclotron frequency**»
4. **Tuesday June 5**, poster TP 662: Gasilova et al., «**Multiplexing FTMS data analysis workflow improves downstream top-down structural characterization of proteins**»
5. **Wednesday June 6**, talk ThOC at 02:50, Sagamore 1-3: Kilgour et al., «**AutoPiquer - new developments in robust peak picking for mass spectra**»
6. **Wednesday June 6**, poster WP 283: Kooijman et al., «**Pushing the limits of DESI FT-ICR MS imaging using advanced data acquisition and processing approaches**»
7. **Thursday June 7**, poster ThP 247: Nagornov et al., «**Leveraging targeted and untargeted FTMS applications via advanced processing of transients and big data analysis**»
8. **Thursday June 7**, poster ThP 369: Driver et al., «**Particle-in-Cell simulation of quadrupolar ion detection in the NADEL cell with four detection electrodes**»

Join us for extended discussions and demonstrations at our **exhibit booth 710!**

Schedule your meeting with our FTMS experts via: info@spectroswiss.ch

Spectroswiss was established in 2014 as a spin-out from EPFL by Dr. Yury O. Tsybin. We are located at the EPFL Innovation Park in Lausanne, Switzerland. Welcome!