Visit us at ISMRM 2017 Booth No. 509

Cutting-Edge Solutions for Medical Technology

Sim4Life User Workshop 2017

Tuesday, April 25, 16.30 – 19.30
Ala Moana Hotel, 410 Atkinson Drive, Honolulu

Agenda

16:30 – 16:35	Welcome *Michael Oberle, ZMT Zurich MedTech AG, Switzerland*
16:35 – 17:00	Current & Future Challenges for Design, Validation and Approval of MRI Conditional Safe Implants Keynote Speaker: *Paul Stadnik, Biotronik, USA*
17:00 – 17:20	Active Implantable Medical Device MRI Safety Assessment *Xin Huang, Abbott, USA*
17:20 – 17:40	IMAnalytics- A Novel Solution for Fast Implant MRI Safety Investigations *Earl Zastrow, IT'IS Foundation, Switzerland*
17:40 – 18:00	**Coffee Break**
18:00 – 18:20	Application of Simulation Tools in MR-guided Thermotherapy and MR Safety *Desmond Yeo, GE Global Research, USA*
18:20 – 18:40	Evaluating Phased Arrays From Experimental Data *Adam Farag, Ceresensa, Canada*
18:40 – 19:00	Inter-subject SAR Variability for UHF Body Imaging: A Model Database Approach *Alexander Raaijmakers, Department of Radiotherapy, University Medical Center Utrecht, The Netherlands*
19:00 – 19:15	MRI RF Safety: Personalized Exposure Assessment from SAR to Thermal Dose *Manuel Murbach, IT'IS Foundation, Switzerland*
19:15 – 19:30	ZMT Solutions to Reach New Frontiers in Medical Technology *Erdem Ofli, ZMT Zurich MedTech AG, Switzerland*
19:30 – 21:00	**Light Dinner**

To register, please send an email to s4l-sales@zurichmedtech.com

Directions to the User Workshop

Ala Moana Hotel
410 Atkinson Drive
Honolulu
Room: Garden Lanai

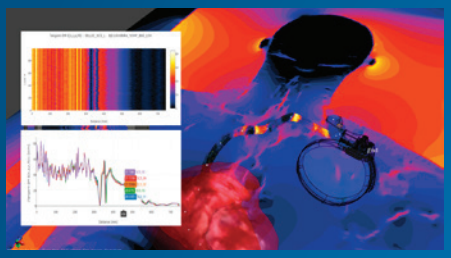
The hotel is within 10 minutes walking distance from the main venue.

SWISS MADE

zurich med tech

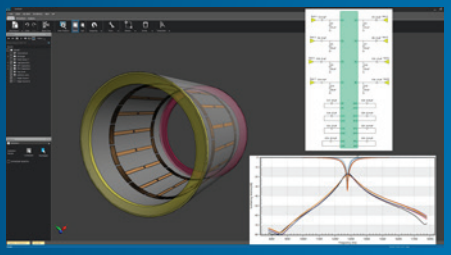
sim4life V3.4 Release Highlights

NEW MODULES



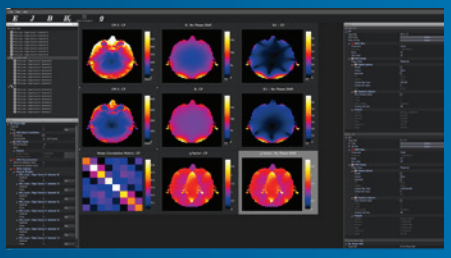
IMAnalytics and the Virtual Population Field Library

This new tool analyzes and provides the statistical evaluation of the deposited power of all implant exposure conditions for the entire patient population in all landmark positions in hours instead of months. A must-have for all where time to market is important.



MATCH

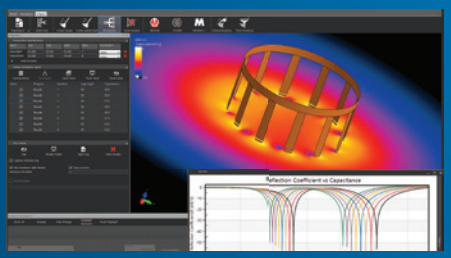
MATCH is a versatile matching circuit application for multiport devices, such as RX/TX MR coil or antenna arrays. The new live-link to Optenni Lab permits instantaneous coil tuning, matching and decoupling for optimizing system performance and consistent safety evaluations. Its Touchstone based input format permits the use of a variety of other circuit simulators as well.



MUSAIK V2

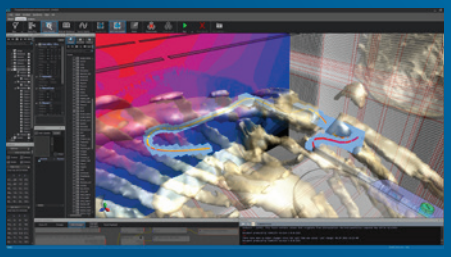
MUSAIK enables the user to import simulation results of array coils and assess their parallel imaging capabilities. Equivalent analysis is available for experimentally obtained data, allowing accurate verification for a range of different design processes. The user can evaluate signal-to-noise ratio (SNR) and 2D parallel MRI g-factor maps from simulated and/or experimental datasets. The new MUSAIK V2 is now fully integrated in Sim4Life with smooth data communication and a revamped powerful user interface.

NEW FUNCTIONALITIES



Parametrization and SWEEPER Engine

This new tool is the most effective implementation today to perform automated large parameter sweeps to derive sensitivities for imaging and across patient populations. Simulation projects can be fully parametrized using variables and mathematical expressions throughout the framework. Fully configurable parameter sweeps allow the user to focus on how the analysis should be done, while delegating the number crunching and data management to the background engine.



Adaptive Subgridding

The next-generation of GPU empowered adaptive subgridding supports refining areas with small features in non-rectangular volumes while saving computational time. This places an optimum arrangement of individual subgrids around any solid/mesh/CAD model, and enables drastically reduced computational resources for non-conformally aligned or thin structures.

Those are just some of the many new features that will be available in the Sim4Life V3.4 release! To learn more, visit our website www.zurichmedtech.com or come visit us at booth 509 of ISMRM 2017.

zurich med tech

www.zurichmedtech.com

ZMT is a member of