

**ESMRMB – Lectures on MR**  
**RF simulation for MR systems: Coil design and safety**  
**March 6-8, 2019**  
**FH Aachen – University of Applied Sciences / DE**

**Wednesday, 6.3.2019**

- 8:00            **Registration & Reception**
- 8:30            **Opening and Introduction**  
*A. Raaijmakers, A. Bitz*
- 8:45            Lecture: **Electromagnetic Theory**  
*A. Bitz, FH Aachen*
- 10:15           Break
- 10:30           Lecture: **Numerical methods**  
*T. Wittig, CST, Darmstadt*
- 12:00           Lunch
- 13:00           **Introduction – Sim4Life**  
*H. Bousleiman, ZurichMedTech, Zürich*
- 13:45           **Introduction – CST Studio Suite**  
*T. Wittig, CST, Darmstadt*
- 14:30           Break
- 14:45           **Practical Exercise 1**  
*S. Orzada / B. Steensma & Tutors*
- 16:15           Break
- 16:30           **Practical Exercise 2**  
*S. Orzada / B. Steensma & Tutors*
- 18:00           Adjourn

**Thursday, 7.3.2019**

- 8:30            Lecture: **RF coil design**  
*A. Raaijmakers, UMC Utrecht / TU Eindhoven*
- 10:00           Break
- 10:15           Lecture: **Validation methods**  
*O. Kraff, ELH, Essen*

11:15 Break  
11:30 Lecture: **RF safety**  
*C. Collins, NYU, New York*  
13:00 Lunch  
14:00 **Practical Exercise 3**  
*S. Orzada / B. Steensma & Tutors*  
15:30 Break  
15:45 **Practical Exercise 4**  
*S. Orzada / B. Steensma & Tutors*  
17:15 Adjourn  
19:00 Social event

**Friday, 8.3.2019**

8:30 Lecture: **RF safety - Regulatory perspective**  
*Manuel Murbach, IT'IS, Zürich*  
10:00 Break  
10:15 Lecture: **Implant safety**  
*J. Tokaya, UMC Utrecht*  
11:45 Lunch  
12:45 **Practical Exercise 5**  
*S. Orzada / B. Steensma & Tutors*  
14:15 Break  
14:30 **Practical Exercise 6**  
*S. Orzada / B. Steensma & Tutors*  
16:00 Adjourn