

School of MRI 2025
"MR SAFETY COURSE: RESHAPE YOUR SKILLS"
Bolzano, Conference Hall General Hospital 15-18 January 2025

Start time	Session title	Speaker
	PRE.-COURSE	
	Basics: The 3 electromagnetic fields in MR. What are they for and which are the associated risks?	F. Santini, Ing, PhD, University Basel
	Basics: MRI sequences from the safety point of view	A. Lanaro, Ing. PhD, MR Product specialist, , Milan
	Basics: The patient at risk for MR examinations	M. Maieron, Physicist, Udine
	DAY 1	
08:00	Participants registration	
08:30	Introduction to the course - get to know each other	C. Quattrocchi - N. Oberhofer
09:00	B0 safety issues and ferromagnetic detectors	M. Keen, Physicist PhD
09:45	B0 and implantable devices	U. Zanovello, Ing, PhD, INRIM Torino
10:30	Coffee break	
11:00	RF related safety issues	M. Bonatti, MD, Bolzano
12:00	RF heating and implantable devices	G. Schäfers, Ing, MRComp, Gelsenkirchen
13:00	Lunch	
14:00	MR site planning: what works and what should be avoided	N. Oberhofer, Phys, Bolzano

14:45	MR shielding (static & RF): a glance behind	Speaker form IMEDCO
15:30	Coffee break	
16:00	Hands on n.1a: magnetic field and ferromagnetic detectors	To be defined
end 18:30	Hands on n. 1b: tips and tricks to reduce RF-heating	G. Schäfers, Ing, MRComp, Gelsenkirchen
19:00	Welcome reception	
	DAY 2	
08:00	dB/dt related safety issues	to be defined
09:00	dB/dt and implantable devices	Speaker form a company with simulation software
10:00	Coffee break	
10:30	RF induced patient heating: what do manufacturer offer to avoid hot spots?	manufacturer representatives
11:30	dB/dt induced peripheral nerve stimulation (PNS): what do manufacturer offer to reduce PNS?	manufacturer representatives
12:30	Lunch	
13:30	Contrast agents – state of the art	C. Quattrocchi, MD, Univ. Trento
14:15	The environmental burden of MRI (Gd, He, energy,...)	A. Rovira, MD, Univ. Barcelona
15:00	Coffee break	
15:15	Hands on: n 2a: SAR- safety in practice	to be defined

17:15	Hands on n. 2b: tips and tricks to evaluate dB/dt	D. Trevisan, Phys, Bolzano
19:00	Faculty dinner	
	DAY 3	
08:00	Clinical workflow optimization for MR safety	MR Team Bolzano
09:00	Risk management in MR environment	to be defined
10:00	Coffee break	
10:30	MR accidents review - lessons learned	D'Avanzo Maria Antonietta, C. Quattrocchi, MD
11:30	Case study: decisions in case of incomplete information	to be defined S. Trattnig, MD, Uni Vienna?
12:30	Lunch	
13:30	Hands on n. 3: protocol adaptation	Product specialists
15:30	Coffee break	
16:00 end 17:30	Hands on: examples of SAR and dB/dt handling by vendors	
18:00	Social activity	Private guided visit to Ötzi-Museum

DAY 4		
08:00	Hands on: practical MR safety (in groups): safety walk, emergency, critical situation simulation	3/4 groups (M. Bonatti, D. Trevisan, Bolzano MR team and others)
11:00	Briefing	C. Quattrocchi - N. Oberhofer
11:30	Final exam	
12:30	Course end	
13:30 end 17:00	Optional social activity	Easy trekking tour to a nearby panoramic site (Renon)