

Venue

Graz University of Technology
Inffeldgasse 12
8010 Graz, Austria

Registration

For registration, please write an email to jasmin.grosinger@tugraz.at
and reinhard.teschl@tugraz.at until end of August.

Workshop fees

Regular participants: free*

Students and speakers: free*

* Registration is mandatory.

Workshop homepage

<http://www.ihf.tugraz.at/news/konferenzen/arge-hft/>



7th Workshop of the Radio Frequency Engineering Working Group of the Austrian Research Association

ÖFG // ÖSTERREICHISCHE
FORSCHUNGSGEMEINSCHAFT



Sponsors:



September 09-10, 2019
Graz, Austria



Program - September 09, 2019

10:00-11:00	Plenary Session Short Welcome by Ass.-Prof. Grosinger and Dr. Reinhard Teschl <u>Keynote Talk</u> : Challenges of Multi-Interface UHF RFID Transponders, <i>L. Zöschner</i> (NXP Semiconductors Austria)
11:00-11:30	Coffee Break
11:30-12:30	Session: Wireless Power Transmission and RFID Technologies
	Experimental evaluation of a UHF MIMO RFID system for positioning in multipath channels <i>S. Grebien, F. Galler, D. Neunteufel, U. Mühlmann, S. Maier, H. Arthaber, K. Witrisal</i>
	Localization of UHF RFID magnetic field sensor tags <i>R. Fischbacher, L. Görtschacher, w. Bösch, J. Grosinger</i>
	Efficient assessment of the impact of metallic obstacles on the wireless power transfer in loosely coupled links <i>B. Deutschmann, L. Görtschacher, P. Priller, J. Grosinger</i>
12:30-13:30	Lunch Break Mensa, Inffeldgasse 10
13:30-14:30	Session: Mixed-Mode and Digital Signal Processing Circuits and Systems
	A concept for the multiphase RF transmitter architecture <i>D. Hamidovic, C. Mayer, A. Springer</i>
	Feed forward noise cancellation in phase-locked loops <i>B. Pühringer, T. Mayr, A. Springer</i>
	Design of a low-power and low-cost receiver front-end based on a N-path filter design <i>T. Schumacher, T. Faseth, H. Pretl</i>
14:30-15:00	Coffee Break
15:00-16:00	Session: Semiconductor Devices and Monolithic ICs
	A CMOS integrated duplexer based on self-interference-cancellation <i>G. Batistelli, J. Sturm, W. Bösch</i>
	A 16 nm FinFet power- and phase noise-scalable DCO using on-chip tapped inductor <i>E. Hager, S. Broussev, H. Pretl</i>
	Nano-power digital low drop out regulator for WSN based on event-driven control and integrated VCO <i>C. Konstantopoulos, T. Ußmüller</i>
16:00-16:15	Short Break
16:15-17:15	Session: Antenna Arrays and Integrated Beam Formers / Nonlinear Circuit and System Analysis, Simulation, and Design
	Mutual coupling reduction of aperture-coupled antenna array using UC-EBG superstrate <i>P.H. Mukti, H.S. Farahani, H. Paulitsch, W. Bösch</i>
	Planar lenses for micro- and mm-wave applications <i>J. Köhler, M. E. Gadringer, W. Bösch</i>
	Analytical solution for the large-signal matching problem using polyharmonic distortion (PHD) based models <i>B. Pichler, H. Arthaber</i>
18:00-18:30	Workshop Keynote

	T. Lüftner (Silicon Austria Labs GmbH)
18:30	Workshop Dinner Mensa, Inffeldgasse 10

Program - September 10, 2019

09:30-10:00	Plenary Session <u>Keynote Talk</u> : To be defined, <i>C. Mecklenbräuker</i> (Vienna University of Technology)
10:00-10:40	Session: Radar and Broadband Communication Systems
	Human body influence in UWB channels <i>T. Wilding, U. Mühlmann, K. Witrisal</i>
	Radar target stimulation: The challenge of reflections <i>M. Vorderderfler, M. E. Gadringer, D. Amschl, W. Bösch</i>
10:40-11:10	Coffee Break
11:10-12:10	Session: Wireless and Cellular Communication Systems
	LDACS a future airborne communication system: Synchronization analysis for low SNR scenarios <i>M. Zaisberger, H. Arthaber</i>
	Novel indoor ranging approaches employing low-cost off-the-shelf transceiver chips <i>D. Neunteufel, H. Arthaber</i>
	Bluetooth low energy (BLE) interference modeling <i>H. Kavousi, H. Arthaber</i>
12:15-13:15	Lunch Break Mensa, Inffeldgasse 10
13:15-14:15	Session 1: Doctoral School on 5G and IoT
	A secure indoor wireless system with an accurate localization <i>B. Núria, D. Eshagh, B. Etlzinger, A. Springer</i>
	Cooperative localization of low-power radio nodes in ultra-dense IoT deployments <i>L. Wielander, K. Witrisal</i>
	Accuracy requirements for cooperative radar on UAVs with sensor fusion <i>M. Ashury, C. Mecklenbräuker</i>
14:15-14:45	Coffee Break
14:45-15:45	Session 2: Doctoral School on 5G and IoT
	To be defined.
	To be defined.
	To be defined.