	CONFERENCE WELCOME AND PLENARY SESSION – Chapel – 8:15-9:45 AM Plenary Speaker – Prof. Helmut Bölcskei, ETH Zurich							
MON	"Fundamental Limits of Deep Neural Network Learning"							
MON AM	NAUTILUS	SURF/SAND	TRITON	HEATHER	SCRIPPS	TOYON	ACACIA	MERRILL (Posters)
8:15-9:55 & 10:15-11:55 [MA]	MA1b Beyond Massive MIMO	MA2b Advances in Sequential Estimation, Sampling, and Testing	MA3b New Perspectives on Multiple Access	MA4b Deep Learning for Inverse Problems	MA5b Graph signal Processing: Advances in Sampling, Filtering, Reconst.	MA6b Compilation for Spatial Computing Architectures	MA7b Model, Optimization, and Machine Learning for Computation- al Imaging	MA8b 10:15 - 11:55 8b1 – Audio, Video, and Speech Processing 8b2 – DOA Estimation, Beamforming & Localization 8b3 – Array Processing for Signal Detect. & Classification
MON PM 1:30-3:10	MP1a MIMO for mmWave and THz	MP2a Distributed Learning in Multi-Agent Environments	MP3a Optimization Methods for Wireless Comms.	MP4a Geometric Deep Learning 1	MP5a Compressive Sensing and Line Spectral Estimation	MP6a Signal Proc. Advances in Neural Modeling	MP7a Mathematical Data Science	MP8a 1:30 - 3:10 8a1 - Arch. & Implementation 8a2 - Wireless Networks 8a3 - Networks: Models and Systems
& 3:30-5:10 [MP]	MP1b mmWave MIMO Systems Low- Complexity Processing	MP2b Distributed Optimization in Networked Settings	MP3b Tensor Modeling and Processing	MP4b Geometric Deep Learning 2	MP5b Advances in Bayesian Machine Learning	MP6b Neuromorphic Computing	MP7b Geometric and Topological Methods	MP8b 3:30 - 5:10 No poster sessions in late afternoon
TUE AM	TA1a Machine Learning for Channel Coding.	TA2a Spectrum Sharing	TA3a Distributed MIMO	TA4a Statistical Signal Processing and Big Data Analysis	TA5a Signal Processing Advances in Neuroimaging	TA6a Computer Arithmetic	TA7a Adaptive Beamforming and Interference Mitigation	TA8a 8:15 - 10:45 8a1 - Convex, Non-Convex Optimiz. and Phase Retrieval 8a2 - Comp. Sensing, Sparsity 8a3 - Array Process. & Multi- Sensor Systems for Radar 8a4 - Transmission and Beamforming Schemes
8:15-9:55 & 10:15-11:55 [TA]	TA1b Short-Packet Comms.	TA2b Signal Processing for Multiple- Antenna Systems with Coarsely Quantized Signals	TA3b Optimization of MIMO Systems	TA4b Theory of Deep Learning	TA5b Neuroscience- Inspired Machine Learning	TA6b VLSI Systems for Comms.	TA7b Automotive Radar	TA8b 10:15 - 11:55 8b1 – Comms Systems 8b2 – Learning and Estimation in Imaging 8b3 – Cogni. Radio, Spectrum Sharing, Localization, Radar 8b4 – Sys. Analysis, Perform. Evaluation and Optimization
TUE PM 1:30-3:10 &	TP1a Vehicle-to- Everything (V2X) Comm. for Emerging Applications	TP2a Self- Interference Cancellation in Radio Frequency Transceivers	TP3a MIMO an Cognitive Radar	TP4a Machine Learning and Inverse Problems	TP5a Deep Learning and Neuroscience	TP6a Sparse Arrays, Non-convex Inverse Problems, and Fundamental Limits	TP7a Machine Learning and Optimization in Distributed Networks	TP8a 1:30 - 3:00 8a1 - Coding and Caching 8a2 - Multi-Sensor Parameter Estimation 8a3 - Array Signaling, Calibration, and Processing 8a4 - Biomedical Imaging and Signal Processing
3:30-5:35 [TP]	TP1b Reliable and Low-Latency MIMO Comm.	TP2b Signal Processing for UAV/UGV Sensing	TP3b MIMO Beamforming and Beamtracking	TP4b Machine Learning Advances in Computational Imaging	TP5b Inference and Learning in Graphs	TP6b AI/Machine Learning Architectures	TP7b Optimization Methods in Array Processing	TP8b 3:30 - 5:35 8b1 - Arch. for Arithmetic and Signal Processing Systems 8b2 - Online, Active Learning, Adaptive and Cogni. Systems 8b3 - Matrix, Tensor Methods
WED AM 8:15-9:55	WA1a Hardware- Aware MIMO Transmission Strategies	WA2a Advances in Neural Modeling	WA3a Modulation and Coding	WA4a Deep Learning Theory	WA5a Gam- Theoretic Learning in Networks	WA6a Machine Learning in Comms.	WA7a Imaging and Multimedia	WA8a 8:15 - 9:55 8a1 – Est., Inference, Learning 8a2 – Image Proc. Applications 8a3 – Signal Proc. Application 8a4 – 5G and Beyond
& 10:15-11:30 [WA]	WA1b IoT and Cell- Free Massive MIMO	WA2b Estimation, Optimization, and Learning	WA3b Ultra-Reliable and Low- Latency Comms.	WA4b Machine Learning	WA5b Age of Information: Advances	WA6b Signal Processing Advances in Neuroimaging 2	WA7b Signal Processing Methods for Radar	WA8b 10:15 - 11:30 8b1 – Deep Learning 8b2 – Detection, Est. Algorith. 8b3 – Neural Signal Processing 8b4 – Machine Learning