



UComms'18 schedule. v1.0, August 7th, 2018

Monday, August 27, 2018	
16:00	Registration at Villa Marigola until 18:00
19:00	Ice Breaker – Ristorante Golf, Lerici – Venere Azzurra



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Tuesday, August 28, 2018	
08:15	Bus to the venue
08:15	Registration
09:00	Opening session and welcome by the conference chairs and the CMRE Director, Dr. Catherine Warner
09:15	Keynote Speech By Prof. Mandar Chitre: <i>Underwater Communications And Networking: Where Do We Go From Here?</i>
Technical Session: Applications and Requirements	
10:00	<i>Integrated Communication Network For Underwater Applications: The SWARMs Approach</i> F. Pacini, G. Paoli, O. Kebkal, V. Kebkal, K. Kebkal, J. Bastos, C. Monteiro, V. Sucasas, B. Schipperijn
10:20	<i>Flying Acoustic Modem: Results And Future Concepts Of Operation</i> J. Galante, M. Ribeiro, P. Dias, H. Jain, P.b. Sujit, J. Sousa
10:40	Coffee Break
11:10	<i>Underwater Acoustic Communications for Submarines - A Sonar Company's Perspective</i> F. Schulz, T. Wiegand
11:30	<i>Self-Synchronization Of Multiple Vehicles Using Ambient Impulsive Noise</i> P. Naughton, T. Salam, P. Tueller, P. Roux, C. Schurgers, R. Kastner, J. Jaffe, P. Roberts
11:50	<i>On The Feasibility Of Video Streaming Through Underwater Acoustic Links</i> F. Campagnaro, R. Francescon, D. Tronchin, M. Zorzi
12:10	<i>Field Experiments With A Dual-Frequency-Band Underwater Acoustic Network</i> H. Dol, M. Colin, P. vanWalree, R. Otnes
12:30	Lunch
Technical Session: Simulation, Models and Testbeds	
14:00	<i>NETSIM: A Realtime Virtual Ocean Hardware-in-the-loop Acoustic Modem Network Simulator</i> T. Schneider, H. Schmidt
14:25	<i>Phase Estimation Error of a PSK Underwater Acoustic Signal in Presence of Multipath and Volume Scattering</i> K. Kebkal, A. Mashoshin, S. Yakovlev, O. Kebkal, V. Kebkal
14:50	<i>Making The Most Of Field Data To Support Underwater Acoustic Communications R&D</i> G. Deane, J. Preisig, A. Singer
15:15	<i>Communication Operations at THEMO: the Texas A and M - University of Haifa - Eastern Mediterranean Observatory</i> R. Diamant, S. Dahan, I. Mardix
15:40	Coffee Break
Technical Session: Architectures and Novel Stacks	
16:10	<i>The SEANet Project: Toward a Programmable Internet of Underwater Things</i> E. Demirors, J. Shi, A. Duong, N. Dave, R. Guida, B. Herrera, F. Pop, G. Chen, C. Casella, A. Tadayon, M. Rinaldi, S. Basagni, M. Stojanovic, T. Melodia
16:35	<i>Dflood Network Protocol Over Commercial Modems</i> R. Otnes, J. Locke, A. Komulainen, S. Blouin, D. Clark, H. Austad, J. Eastwood
17:00	<i>A Cross-Stack QoS Routing Approach For Underwater Acoustic Sensor Networks</i> L. Emokpae, Z. Liu, G. Edelmann, M. Younis
17:25	<i>An Acoustically Powered Battery-less Internet of Underwater Things Platform</i> R. Guida, E. Demirors, N. Dave, J. Rodowicz, T. Melodia
17:50	END
18:05	Bus from the venue



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Wednesday, August 29, 2018	
08:30	Bus to the venue
08:30	Registration
Technical Session: Communications in Challenging Environments + Interoperability and Standards	
09:00	<i>Impact of Persistent Bubbles on Underwater Acoustic Communication</i> G. Chua, M. Chitre, G. Deane
09:25	<i>A Modem Design for Underwater Acoustic Networking in the High North</i> C. Pelekanakis, D. Green, Y. Fountzoulas, S. Fioravanti, J. Alves, S. Blouin
09:50	<i>An Adaptive Cross-layer Routing Protocol for Underwater Acoustic Networks</i> R. Petrocchia, C. Pelekanakis, J. Alves, S. Fioravanti, S. Blouin, S. Pecknold
10:15	<i>Ambiguities In Underwater Acoustic Communications Terminology And Measurement Procedures</i> P. vanWalree, D. Green, R. Otnes
10:40	Coffee Break
Technical Session: Physical Layer In Acoustic Communications	
11:10	<i>Low-Complexity UAC Modem and Data Packet Structure</i> Y. Zakharov, F. Yuan, P. Mitchel, N. Morozs, B. Henson, L. Chen, T. Tozer
11:35	<i>Experimental Evaluation of Uplink Underwater Acoustic Communications in Very High Frequency Massive MIMO System</i> J. Rudander, P. Orten, T. Husøy, P. vanWalree
12:00	<i>Pragmatic Performance Optimization of a Multichannel DFE System for a Wideband 100-kbps 1-km Subsea Acoustic Modem</i> J. Kusuma, A. Jarrot, A. Gelman, A. Croux, G. Choi
12:25	Lunch
14:00	<i>Invited Talk By Prof. Arthur Baggeroer: Acoustic Communications With Directional Arrays For UUV's</i>
14:40	<i>Detecting OSDM Signals in Sparse Channels and Snapping Shrimp Noise</i> A. Mahmood, M. Chitre
15:05	<i>Exploitation of Spatial Coherence for Reducing the Complexity of Acoustic OFDM Systems</i> A. Tadayon, M. Stojanovic
15:30	Coffee Break
16:00	<i>Coding for Short Messages in Multipath Underwater Acoustic Communication Channels</i> M. Behgam, R. Zheng, Z. Liu
16:25	<i>Model-based Data-driven Learning Algorithm for Tuning an Underwater Acoustic Link</i> P. Anjangi, M. Chitre
16:50	<i>Interpreting Different Features of Shallow Water Acoustic Channels Using Braid Manifolds</i> A. Sen Gupta, R. McCarthy
17:15	<i>Round-table Discussion on Physical Layer In Acoustic Communications</i>
17:45	End
18:00	Bus from the venue



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Thursday, August 30, 2018	
08:30	Bus to the venue
08:30	Registration
	Technical Session: Non-Acoustic Communication Modalities
09:00	<i>Laser Based Underwater Communication Experiments In The Baltic Sea</i> T. Scholz
09:25	<i>Modeling the Performance of Optical Modems in the DESERT Underwater Network Simulator</i> A. Signori, F. Campagnaro, M. Zorzi
09:50	<i>Scintillations Of RGB Laser Beams In Weak Temperature And Salinity-Induced Oceanic Turbulence</i> H. Oubei, X. Sun, T. Khee Ng, O. Alkhazragi, M. Alouini, B. S. Oo
10:15	<i>Use of Multi-Spectral High Repetition Rate LED Systems for High Bandwidth Underwater Optical Communications, and Communications to Surface and Aerial Systems</i> P. McGillivray, V. Chirayath, J. Baghdady
10:40	Coffee Break
11:10	<i>A Study of Modulation Formats for the Blue Ray Underwater Optical Modem</i> E. Herji, P. André, J. Gomes, P. Góis, A. Pascoal
	Technical Session: Networking, Localisation and Scheduling
11:35	<i>Unsynchronized Dual-Hop Scheduling for Practical Data Gathering in Underwater Sensor Networks</i> N. Morozs, P. Mitchell, Y. Zakharov
12:00	<i>Energy-efficient Wireless Analog Sensing for Persistent Underwater Environmental Monitoring</i> V. Sadhu, S. Devaraj, D. Pompili
12:25	Lunch
14:00	<i>Q-Learning Based Adaptive Channel Selection for Underwater Sensors Networks</i> A. Pottier, P. Mitchell, F. Socheleau, C. Laot
14:25	<i>Belief Propagation Based Multi-AUV Cooperative Localization in Anchor-free Environments</i> Y. Li, Y. Wang, X. Guan
14:50	<i>Parameter-Free Network Localization For Mobile Vehicles, By Learning From Data</i> C. Soares, J. Gomes
15:15	Coffee Break
15:45	<i>Collaborative Hybrid ARQ for CDMA-based Reliable Underwater Acoustic Communications</i> M. Rahmati, D. Pompili, R. Petroccia
16:10	<i>Round-table Discussion on Underwater Networking</i>
16:40	Closing Session
16:55	End
17:10	Bus from the venue
18:30	Bus to the social dinner
19:15	Social Dinner at the Hotel Golfo dei Poeti Relais & SPA, Montemarcello
23:30	First bus from the dinner
TBD	Second bus from the dinner



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