

**AMEREM – EUROEM – ASIAEM Memos**

Memo 13

20 September 2018

**Technical Program Statistics for AMEREM 2018**

Prepared by:

**William Radasky and Edl Schamiloglu**

In this Memo, we document certain parameters relating to the Technical Program of AMEREM 2018, held at the University of California, Santa Barbara (UCSB) in Santa Barbara, California from 27-31 August 2018

The purpose of this Memo is to present some statistics and to examine the models of the technical program organization. In Table 1, we present the data about paper submissions and exhibitors.

**Table 1. Quantity of Papers and Exhibitors for AMEREM 2018**

Number of papers submitted	98
Number of papers rejected	0
Number of papers withdrawn by the authors before the conference	6
Number of accepted papers not presented	0
Number of papers (oral + poster) accepted and scheduled	92
Number of oral session papers (20 minutes)	80
Number of poster papers	6
Number of plenary papers (30 minutes)	6
Number of workshops/tutorials	0
Number of registered participants	127
Number of registered guests	8
Number of Sponsors/Exhibitors	3/6*
Other Meetings (IEC SC 77C and Permanent HPEM Committee)	2

\* Each of the three sponsors were also exhibitors, so there were only 3 exhibitors who were not also sponsors.

In Table 2, we present the summary schedule for AMEREM 2018. Note that 3 parallel sessions were held due to the reduced number of papers. We had the option of having 4 parallel sessions, but this was not required.

**Table 2. Summary Schedule for AMEREM 2018**

**AMEREM 2018 Program at a Glance (Page 1 of 2)**

Day/Date	Time	Corwin West (250)	MCC Theater (150)	Flying A (80)	Mission (40 ppl)	Total Papers	
<b>Tuesday August 28</b>	AM 1 09:00 – 10:20	WELCOME SESSION in Corwin West-1					
	AM 2 10:40 – 12:00	WELCOME SESSION in Corwin West-2					
	PM 1 1:30 – 2:50 pm	TC 04 – 1 (139, 122, 118, 103)	TC 05 – 1 (116, 131, 127, 175)	SS 01 (141, 158, 159)		11	
	PM 2 3:20 – 5:00 pm	TC 04 – 2 (167, 107, 164, 165)	TC 05 – 2 (169, 132, 188, 149, 145)	SS 02 & SS 03 (168, 182, 180, 153, 198)		14	
<b>Wednesday August 29</b>	AM 1 09:00 – 10:20	TC 04 – 3 (176, 104, 108, 126)	TC 14 (121, 137, 144, 171)	TC 07 – 1 (189, 102, 110)		11	
	AM 2 10:40 – 12:00	TC 04 – 4 (146, 160, 119, 193)	Open	TC 07 – 2 (163, 162, 120)		7	
	PM 1 1:30 – 2:50 pm	Poster Session (111, 124, 125, 134, 140, 185)				6	
<b>TOTAL Papers on Tuesday and Wednesday</b>						49	

Note: The Beach BBQ begins at 4:30 pm at Goleta Beach, so free time is added after posters

**AMEREM 2018 Program at a Glance (page 2 of 2)**

Day/Date	Time	Corwin West (250)	MCC Theater (150)	Flying A (80)	Mission (40 ppl)	Total
<b>Thursday August 30</b>	AM 1 09:00 – 10:30	Plenary Session in Corwin West – 1 (109, 174, 192)				3
	AM 2 10:50 – 12:20	Plenary Session in Corwin West – 2 (197, 187, 196)				3
	PM 1 1:30 – 2:50 pm	Plenary Session in Corwin West – 3 (Awards)				0
	PM 2 3:20 – 5:00 pm	TC 04 – 5 (138,181,151,106)	TC 06 (114, 172, 135)	TC 08 (190, 173, 170)		10
<b>Friday August 31</b>	AM 1 09:00 – 10:20		TC 02 – 1 (101, 117, 129, 128)	TC 01 – 1 (105, 156, 148)	TC 11 & TC 12 (184, 147, 142)	10
	AM 2 10:40 – 12:00		TC 02 – 2 (130, 157, 179, 178)	TC 01 – 2 (143, 194)	TC 03 (150, 155, 183, 115)	10
	PM 1 1:30 – 2:50 pm		TC 09 (191, 154, 186)	TC 13 (166, 195, 123, 133)		7
	PM 2 3:20 – 5:00 pm					0
<b>TOTAL Papers on Thursday and Friday</b>						43

80 regular oral papers, 6 plenary oral papers, 6 poster papers = 92 papers

In Table 3 we present the list of Technical Committees and their Chairs and Vice Chairs.

**Table 3. Chairs and Vice-Chairs of Technical Committees**

Given Name	Family Name	TC	Short Title	Organization
Dave	Giri	1	HPEM-Sources, Antennas, Facilities	Pro-Tech, US
Bill	Prather	1	HPEM-Sources, Antennas, Facilities	Air Force Research Laboratory, US
Jean-Philippe	Parmantier	2	HPEM-Coupling/Structures/Cables	ONERA, France
Lihua	Shi	3	HPEM-Meas. Techniques	E3OE Laboratory, China
Anthony	Wraight	3	HPEM-Meas. Techniques	Ministry of Defence, UK
Martin	Schaarschmidt	3	HPEM-Meas. Techniques	Bundeswehr Research Institute for Protective Technologies and NBC-Protection, Germany
Bill	Radasky	4	HPEM-IEMI Threats/Effects/Protection	Metatech Corp., US
Richard	Hoad	4	HPEM-IEMI Threats/Effects/Protection	QinetiQ, UK
Armin	Kaelin	5	HPEM-System Level Protection and Testing	EMProtec, Switzerland
Yanzhao	Xie	5	HPEM-System Level Protection and Testing	Xi'an Jiaotong University, China
Mats	Backstrom	5	HPEM-System Level Protection and Testing	Saab Group, Sweden
Farhad	Rachidi	6	HPEM-Lightning EM Effects/Measurement	EPFL, Switzerland
Marcos	Rubinstein	6	HPEM-Lightning EM Effects/Measurement	HEIG-VD, Switzerland
Sergey	Tkachenko	7	HPEM-Analytic and Numerical Modeling	University of Magdeburg, Germany
Shengquan	Zheng	7	HPEM-Analytic and Numerical Modeling	Science and Technology on EMC Laboratory, China
Lars-Ole	Fichte	8	HPEM-Bioeffects/Medical Applications of EM	Helmut-Schmidt Univ., Germany
Dave	Giri	8	HPEM-Bioeffects/Medical Applications of EM	Pro-Tech, US
Koichi	Ito	8	HPEM-Bioeffects/Medical Applications of EM	Chiba University, Japan
Dave	Giri	9	UWB-Ant. Design/Radiation	Pro-Tech, US
Everett	Farr	9	UWB-Ant. Design/Radiation	Farr Research, US
Vladimir	Koshelev	11	UWB-Target Detection/Imaging	HCEI, Russia
Sergey	Shipilov	11	UWB-Target Detection/Imaging	Tomsk National University, Russia
Felix	Vega	12	UXO-Landmine/IED Detection and Neutralization	National University of Columbia, Columbia
Xiong	Wu	13	HPEM-EM Transients in UHV/EHV Trans Lines & Substations	State Grid, China
Yanzhao	Xie	13	HPEM-EM Transients in UHV/EHV Trans Lines & Substations	Xi'an Jiaotong University, China
Bill	Radasky	13	HPEM-EM Transients in UHV/EHV Trans Lines & Substations	Metatech Corp., US
Chaouki	Kasmi	14	Statistical Methods in HPEM	DarkMatter LLC, UAE
Lars-Ole	Fichte	14	Statistical Methods in HPEM	Helmut-Schmidt University, Germany

**SPECIAL SESSIONS**

Edl	Schamiloglu	SS-01	Meta Materials for High-Power Applications	University of New Mexico, US
Filippo	Capolino	SS-01	Meta Materials for High-Power Applications	UC Irvine, US
Steven	Anlage	SS-02	EM Interactions with Nonlinear Circuits in Complex Systems	University of Maryland, US
Thomas	Antonsen	SS-02	EM Interactions with Nonlinear Circuits in Complex Systems	University of Maryland, US
Steven	Anlage	SS-03	Statistical Methods for Connected Complex Structures and Computational EM	University of Maryland, US
Thomas	Antonsen	SS-03	Statistical Methods for Connected Complex Structures and Computational EM	University of Maryland, US

In Table 4 we present the paper count by technical committee.

**Table 4 Papers Presented by TC and Special Sessions (Including Plenary Papers)**

TC 1	HPEM-Sources, Antennas, Facilities	7
TC2	HPEM-Coupling/Structures/Cables	11
TC3	HPEM-Measurement Techniques	4
TC4	HPEM-IEMI Threats/Effects/Protection	22
TC5	HPEM-System Level Protection and Testing	10
TC6	HPEM-Lightning EM Effects/Measurements	5
TC7	HPEM-Analytic and Numerical Modeling	6
TC8	HPEM-Bioeffects/Medical Application of EM	3
TC9	UWB-Antenna Design/Radiation	4
TC10	Previously cancelled	
TC11	UWB-Target Detection/Imaging	2
TC12	UXO-Landmine/IED Detection and Neutralization	1
TC13	HPEM-EM Transients in UHV/EHV Transmission Lines and Substations	5
TC14	HPEM-Statistical Methods in HPEM	4
SS1	Meta Materials for High-Power Applications	3
SS2	EM Interactions with Nonlinear Circuits in Complex Systems	2
SS3	Statistical Methods for Connected Complex Structures and Computational EM	3

Total = 92

Note that regular TCs with poor participation (marked in red) should be considered for removal in the future.

In Table 5 we list the presented papers by Country for AMEREM 2018 along with the attendance by country (including guests).

**Table 5. Presented Papers and Attendance by Country**

<u>Country</u>	<u>Papers Accepted</u>	<u>Conference Attendees</u>
United States	31	55
China	16	16
France	8	8
South Korea	8	17
Germany	6	5
Switzerland	6	6
Sweden	4	7
UK	4	8
Columbia	2	3
Japan	2	3
Lithuania	2	2
Norway	2	2
Israel	1	1
Singapore	<u>0</u>	<u>2</u>
	Total= 92	135

Since papers were occasionally written by authors of different countries, the papers in the list above were assigned to the country of the contact author (normally the one who submitted the paper). It is noted that there were no problems with visa cancelations, which in a way was surprising due to the U.S. tightening its visa process. We were very relieved at this outcome.

There were awards presented on Thursday afternoon for: the Best Student Conference Paper (2), the Best HPEM Notes over the past 2 years (2), the HPEM Fellow awards (6) and the Carl E. Baum Medals (2). The details of these awards will be described in a separate memo.