

IEEE Aerospace Electronic Systems Italy Chapter Update

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2022-2024 AESS BoG

Italy Section - AES Chapter Chair

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2022 AESS Strategic Planning Meeting (Pisa, Italy)

14-15 February 2022



Roadmap



- ► Introduction to IEEE Italy Section AES Chapter.
 - Chapter Structure.
 - Chapter Finance.

► Activities of the IEEE Italy Section — AES Chapter.

Conclusions Towards a Brief Moment of Reflection (since history appears to be repeating and moving fast).



Introduction to IEEE Italy Section – AES Chapter: Structure



- ▶ The IEEE Italy Section AES Chapter belongs to IEEE Region 8 (Europe) and follows the AESS leitmotiv on the advancement of integrated electronic systems and large-scale integrated interoperable systems.
 - In particular, the IEEE Italy Section AES Chapter is a professional home for Italian engineers, physicists, and mathematicians from academia, industry, and research centers including leading authorities for Naval, Ground-based, Airborne, Spaceborne, and Underwater Inference Systems.

- Current Chapter Officers (elected in mid 2017):
 - Alfonso Farina (LFIEEE) Chapter Chair
 - Marco Maffei (SMIEE) Chapter Vice Chair and Treasurer

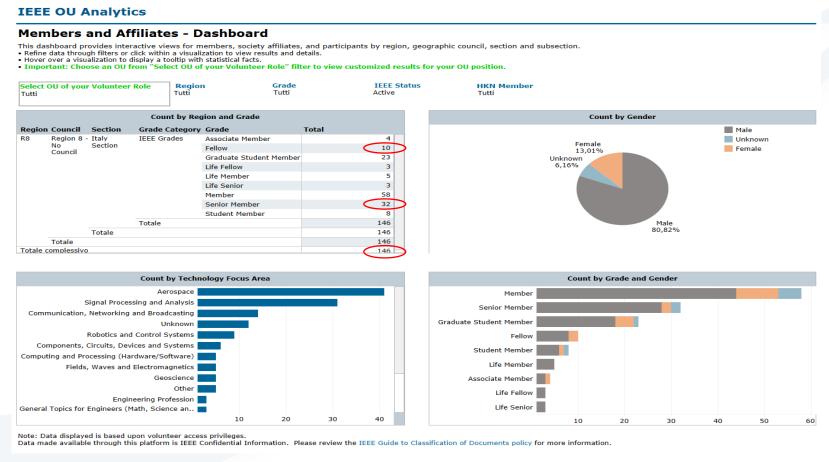




Introduction to IEEE Italy Section – AES Chapter: Structure



- ► From 2017 to date, the IEEE Italy Section AES Chapter size increased from 105 to 146 members (+ 39%), comprising 10 Fellows and 32 Senior Members (including 4 members of the AESS BoG).
 - The Italian AES Chapter is the largest chapter within the IEEE Italy Section.





Introduction to IEEE Italy Section – AES Chapter: Finance



- ► The IEEE Italy Section AES Chapter net financial status increased from 28.51 EURO in 2017 to 1,829.33 EURO at the end of 2021, mostly relying on contributions from the Section and more marginally from the Society (see the profit-and-loss budget below).
 - The Italian AES Chapter thanks the Society for stressing the availability of additional financial support for local chapters.
- ▶ The IEEE Italy Section Constitution does not allow Italian chapters any bank account ownership.
 - The IEEE Italy Section manages bank accounts on behalf of the Italian chapters. So far, the Italian AES Chapter is OK with this policy, as this simplifies chapter management.

AES10			CH08065	Aerospace and Electronic Systems Society
DATE	IN	OUT	Net	Description
02-07-2015	€ 165.15		€ 165 15	Contribution Society 2015
12.07.2017	€ 28.51			Contribution Society 2017
28.04.2018	€ 1,000.00			Contribution Section 2018
24.07.2018	- 1,000	€ 500.00	- ,	Best Radar Paper Award a MetroAeroSpace 2018 - Vincenzo Carotenuto
26.09.2018	€ 127.24			Contribution Society 2018
26.09.2018		€ 15.00		Wire Transfer
26.09.2018		€ 3.50	-€ 3.50	Wire Transfer
05.06.2019		€ 999.18	-€ 999.18	FT.248-FE del 31/05/2019 di Grafica Stef x noleggio portaposter 3rd RRSW a Roma
18.06.2019	€ 1,500.00		€ 1,500.00	Contributoin Section 2019
26.09.2019	€ 226.59		€ 226.59	Contributoin Society AES 2019
26.09.2019		€ 15.00	-€ 15.00	Wire Transfer
26.09.2019		€ 3.50	-€ 3.50	Wire Transfer
20.09.2020	€ 1,500.00		€ 1,500.00	Contribution Section 2020
15.11.2019		€ 181.98	-€ 181.98	Mission Marco Maffei Koln x ExCo Chapters AES
05.11.2020		€ 500.00	-€ 500.00	Student Paper Competition Award - Afief Dias Pambudi
28.07.2021		€ 500.00	-€ 500.00	Best Paper Award IEEE Metrology Radar Systems - Ennio Gambi
			€ 0.00	
		Totale	€ 1,829.33	





- ▶ The IEEE Italy Section AES Chapter manages a mailing list with over 180 people (i.e., current and past Italian AES Chapter members) with monthly updates aimed at:
 - Celebrating members' achievements.
 - Disseminating information on technical events organized by members.
 - Sharing mourning.
 - Clarifying chapter endorsements.
 - Illustrating sponsorships.
 - Issuing awards.
 - Etc.
- ▶ From 2017 to date, the IEEE Italy Section AES Chapter has communicated more than 100 updates.





- As an example in the following excerpt (in Italian) this past Saturday January 29, 2022 with regret all chapter members have been informed of Dr. Skolnik's sad passing.
 - I take the liberty to remind Merrill via the figure below during his plenary speech at the 2008 IEEE Radar Conference in May 2008, Rome, Italy.

Da: Alfonso Farina alfonso.farina@outlook.it **Inviato:** sabato 29 gennaio 2022 10:39:44

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Oggetto: Comunicazione per i membri dell'IEEE AESS Italy Chapter

Cari Amici e Colleghi,

ricevo dalla famiglia la triste notizia della scomparsa del:

Dr. Merrill I. Skolnik

(November 6, 1927 - January 27, 2022).

Mi piace ricordare Merrill con la fotografia che allego relativa al suo plenary speech che tenne alla IEEE Radar Conference nel maggio 2008 a Roma.

Alfonso

https://www.legacy.com/us/obituaries/washingtonpost/name/merrill-skolnik-obituary?pid=201264716& cf chl captcha tk =mTs3E7B0qjYCFQai47uoA36WhwjASD3P5qaqA9u9ygl-1643445605-0-gaNycGzNB1E









- ► The IEEE Italy Section AES Chapter nurtures human relationships among its members.
 - 2018 Celebration Lunch in the Gulf of Naples for Prof Ernesto Conte for his SMIEEE elevation, Naples, Italy, January 11, 2008: a passionate group of researchers, colleagues, and friends met up at Villa Gitana in Pozzuoli for cheering up Prof. Ernesto Conte in his IEEE Senior Member step up paving the way for his eligibility towards a much befitting IEEE fellowship.
 - Prof. Conte has been with the University of Naples Federico II ever since 1970, where he has been Full Professor of Signals Theory engaged in research in communication theory and statistical signal processing.
 - His mentorship activities along with his personality have shaped many of the current brilliant professors and researchers in central and southern Italy.







- Just as an example, a non-exhaustive list of events and activities sponsored by the IEEE Italy Section AES Chapter follows:
 - Endorsement of **Prof. L. less'** lecture "**Spacecrafts Radio Links for Planetary Science**," Thales Alenia Space, Rome, Italy, April 13, **2018**.
 - Endorsement of **Prof. P. Willett'**s lecture "**Distributed Detection and Data Fusion**," (organized by Prof. M. S. Greco and Prof. F. Gini), University of Pisa, Pisa, Italy, October 1, **2018**.
 - Financial and organizational support to the **5th IEEE International Workshop on Metrology for Aerospace**, Rome, Italy, June 20-22, **2018** (including the Best Radar Paper Award).
 - Endorsement of **Dr. L. Callegaro**'s lecture "**The Redefinition of the International System of Units**," (organized by Prof. G. Galati) University of Rome Tor Vergata, Rome, Italy, February 12, **2019**.
 - Endorsement of **Prof. S. Barbarossa**'s lecture "**Graph Signal Processing: Theory and Applications**," (organized by Prof. G. Galati) University of Rome Tor Vergata, Rome, Italy, February 22, **2019**.
 - Financial support to **Prof. P. Lombardo** and **Prof. F. Colone** for the **3rd GTTI Workshop on Radar and Remote Sensing**, Sapienza Congress Center, Rome, Italy, May 30-31, **2019**.
 - Endorsement of **Prof. S. Barbarossa**'s lecture "**Learning in the 5G Edge Cloud**," (organized by Prof. G. Galati) University of Rome Tor Vergata, Rome, Italy, January 29, **2020**.
 - Financial and organizational support to the **7th IEEE International Workshop on Metrology for Aerospace**, Pisa, Italy, 22-24 June, **2020**.
 - Financial and organizational support to the **2020 IEEE International Radar Conference**, Florence, Italy, 21-25 September, **2020** (including the Best Radar Paper Award).
 - Financial and organizational support to the **8th IEEE International Workshop on Metrology for Aerospace**, Naples, Italy, 23-25 June, **2021** (including the Best Radar Paper Award).
 - Endorsement of **Dr. M. Davis**'s lecture "**Ultra Wide Band Surveillance Radar**," (organized by Prof. M. Martorella, Prof. M. S. Greco, and Prof. F. Gini) University of Pisa, Pisa, Italy, October 29, **2021**.



- ▶ Upcoming 2022 activities to be sponsored by the IEEE Italy Section AES Chapter (depending on the evolution of the Covid 19 pandemic):
 - Financial and organizational support to the **9th IEEE International Workshop on Metrology for Aerospace**, Pisa, Italy, 27-29 June, **2022** (including the Best Radar Paper Award).
 - Financial and organizational support to the **2022 Radar Spring Meeting of the AES Italian Chapter**, Naples, Italy, date TBC, **2022**.
 - For this event the AES chapter is looking forward to obtaining financial support by both the Section and the Society. The roadmap of the event is still TBC.
 - The IEEE Italy Section AES Chapter is **planning** to apply for the **IEEE AESS Chapter of the Year Award**.



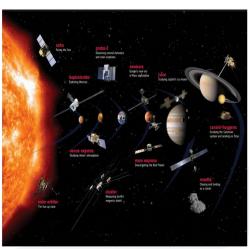
Conclusions towards a Brief Moment of Reflection



- ▶ Today is February 15, 2022.
 - We are all well aware that paramount STEM challenges (such as Mars Exploration, GNSS, Smart Cities, Robotics, Homeland Protection, Complex Logistics and Transport, Genomics, and the like...) do require continuous financial and intellectual efforts.
 - Such efforts entail an harmonious administration and structured plans conceivable solely by huge techno-productive organizations.
 - To this end, the IEEE Italy Section AES Chapter advocates the speed up of the tormented political integration process of the European Union (EU) to properly carry out such endeavors.



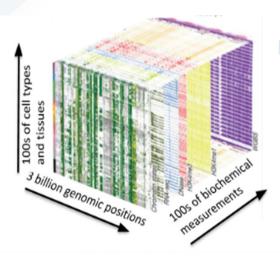




Space Probes



Homeland Protection



Healthcare Challenges



Conclusions towards a Brief Moment of Reflection



The EU is the second largest economy in the world with an internal market of mixed economies based on free market and advanced social models.

Positive Evolution:

- Common Currency & Monetary Stability.
- Harmonization of the Banking System.
- Abolishment of Border Control among states.
- Widespread adoption of democratic values, social welfare, and peace.

Hindrances and Turmoil's:

- Different economic trends (GDP growth rate, employment, public debt wrt GDP) among states.
- Different fiscal legislation among states.
- Different Corruption Perception Index among states.
- Lack of a European Constitution.
- Large corporations strategies (Aerospace & Defense, Telecom, Oil & Gas, Automotive, Financial Services, Steel, Pharmaceuticals, Electronics, Chemicals) still abiding by national interests.
- Staggered resistance to follow the German Rhine Social Market Economy (Soziale Marktwirtshaft).
- EU Members of Parliament (MPs) possessing no legislative initiative.
- Moderate nuclear deterrence and moderate military capabilities.
- Uprising nationalist movements.
- Migration movements handled without an harmonious EU policy.
- Political stall with neighboring Russia and Turkey.
- Brexit and AUKUS (trilateral security pact between Australia, UK and USA, 15 September 2021 for the Indo-Pacific region) skirmish.
- **Upheaval form possible American isolationism**, Trumpism, and customs tariffs.
- **Chinese expansion** in sub Sahel Africa.





Conclusions towards a Brief Moment of Reflection



In a world where continental structures like America, China,have already reached critical mass, how will Europe handle its transition to a regional unit?"

"...will there still be an Atlantic community, and if so, as I fervently hope, how will it define itself? It is a question both sides of the Atlantic must ask themselves."

"The United States has every reason from history and geopolitics to bolster the European Union and prevent its drifting off into a geopolitical vacuum; the United States, if separated from Europe in politics, economics, and defense, would become geopolitically an island off the shores of Eurasia, and Europe itself could turn into an appendage to the reaches of Asia and the Middle East."

H. Kissinger, "World Order," Penguin Press, 2014.









