

Section Name: Italy Section**Reporting Officer Name: Sergio Rapuano****Section Vitality**

Please provide information about the date of last Section elections, date of next elections, and do you have the practice of Vice-Chair becoming the next Section Chair. Section ExCom meetings (list them and provide brief summary if appropriate). List the activities carried out to retain and recruit members and the results obtained.

The last Section elections have been carried out on Feb. 15, 2021, for the term 2021-2022. The next elections will be organized within 2022 and carried out by the end of the year or the first month of 2023. We have the practice of Vice-Chair presented as candidate to the role of Section Chair. Section ExCom meetings are usually held three times per year, plus additional meetings when it is needed. The first meeting is held at the beginning of each year where a preliminary forecast budget is presented and discussed for the current year. The second meeting is held in Spring where the activities of the past year are reported, the activities of the current year are proposed and voted and the final budget of the previous year is presented and discussed. Then, according to our bylaws, a full Section ballot is carried out to approve/reject the budget approved by the ExCom. Finally, a third meeting is held in Autumn to report the past activities and organize the next ones. In order to recruit members and retain the current ones we: (i) develop the participation of young professionals and students, (ii) encourage and support the WIE AG initiatives, particularly in the STEM studies area, (iii) encourage and support the senior member and the fellow elevation, (iv) recognize the commitment of volunteers by awarding them, (v) encourage the active participation of industry members and life members, (vi) organize stands dedicated to membership during all sponsored conferences, (vii) organize tutorials, webinars and contests during conferences open also to students that are not IEEE members.

Currently, the Italy Section counts 5338 members against 5140 at the end of 2020, with a percentage increase of 3.85%. The number of SM decreased from 960 in 2020 to 947 in 2021 but the number of F and LF increased from 196 to 200 units. The number of S and GSM decreased from 1140 in 2020 to 1073 in 2021.

Students

List of Student Branches (SB) in your Section, the newly formed or dissolved SBs, if any since the last meeting reporting (Oct 2020). List the student meetings held and Section activities addressed to Students and Young Professionals.

We have now 30 SBs and SBAGs, most of them active. None has been dissolved yet, although the SB of University of Rome "Tor Vergata" will be likely dissolved due to persistent lack of activity and members. On the opposite side we have extremely active SBs such as the Politecnico di Torino one, that has even formed an internal WIE AG and was awarded as best SB several times. Thanking to the constant activity of the SAC of Italy Section, Paolo Maresca, the SBs are forming a student network with joint inter-University initiatives and collaboration.

Affinity Groups

List of Affinity Groups (YP, LM, WiE, SIGHT, etc.), list of SB AGs, newly formed or dissolved AGs/SB AGs, if any since the last meeting reporting (Oct 2020). List the activities intended to support affinity groups.

The Section has a YP, a LM and a WiE AG and three SBAGs: SB WIE AG Politecnico di Milano, SB WIE AG University of Pavia, and SB WIE AG Politecnico di Torino (the latter has been recently formed).

Our AGs are very active and we usually organize events with them and oriented to their members as well as to the whole Section. During the RTSI Forum 2021 all the AGs had a plenary event and several parallel events: the WIE AG organized a panel that involved Maria-Alexandra Paun, IEEE R8 WIE Subcommittee Chair, a committee meeting and a poster session, the YP AG organized a competition called "My research in 5 min" best video pitch in collaboration with Student Activities Committee, the LM AG, Humanitarian Activities Committee and Ethics of Technology Committee organized a joint round table entitled "Covid-19: impact, threats and opportunities" that involved Abdullateef Aliyu IEEE R8 Humanitarian Activities Committee Chair. Apart from RTSI the AGs continued organizing activities all over the year. The WIE AG organized parallel events in many technical conferences co-sponsored (technically and financially) by the Italy Section. The LM AG prepared two notes about history of IEEE in Italy and history of technology freely available online on the Italy Section web site. A Milestone dedication on "Giovanni Giorgi's Contribution to the Rationalized System of Units, 1901-1902" is being organized by the History Committee, mainly constituted by LM AG members. It is the third in 2021 and the ninth for the Italy Section and it will be held in Rome on next Dec. 15, 2021. Finally, YP are involved in the membership activity during cosponsored conferences with their presence at the membership standas.

Chapters

List of Chapters and SB Chapters in your Section, the newly formed or dissolved Chapters, if any since the last meeting reporting (Oct 2020). Indicate how many have reported on time and received rebate. Highlight some of the activities.

Despite a general reduction of activities, mainly due to COVID-19 fatigue about virtual events, our Chapters continue to be very active in organizing meetings and conferences, often collaborating with their mother Societies, and in supporting the Section initiatives. By looking at vtools the total number of events held or to be held in this year is 191. With the formation of the ITSS Chapter we reached 41 Chapters. The most recently formed Chapter started its activities organizing a workshop on Sept. 24. The Magnetics Society Chapter organizes, within the Italy Section, the conferences Advances In Magnetics (AIM) every two years. AIM 2020 in presence was postponed to 2021 and then moved to virtual format from June 13 to 16. Nevertheless it was a great success, as the previous editions.

Finally, the Section has six SBC: SB Chapter – SMC (University of Cagliari), SB Chapter - Computer Society (Politecnico di Milano), SB Chapter - EMB (Politecnico di Milano), SB Chapter – MTT (University of Pavia), SB Chapter – AP (University of Pavia), SB Chapter – IA (University of Rome La Sapienza).

Industry

List the activities carried out to foster relations with Industry and the results obtained.

The industry is significantly involved in the Section activities in two directions. They contribute to our activities by funding research grants and conferences and by co-writing milestone proposals. The multinational corporation ABB funds a best MS thesis and a best PhD award on yearly basis. Several companies collaborate to the IEEE PES-Italy Section Scholarship Program Plus providing grants that are doubled by the Section every year. The multinational corporation STMicroelectronics collaborated to the preparation of the milestone “Multiple Silicon Technology on a Chip, 1985” dedicated on May 18, 2021 with the speeches of the IEEE Region 8 Director, Antonio Luque and the IEEE President Susan Kathy Land. Another milestone proposal is on preparation with the involvement of STMicroelectronics. On our side the Section supported the milestone proposal dedicated in May and the second milestone proposal involving ST. Our flagship conference, the Forum on Research and Technologies for Society and Industry was funded with the aim of bridging the gap between academy and industry and strengthening the relations between the Italy Section and the industry. In the program of RTSI 2021 a wide, plenary space was provided to topics of interest for companies, with a main focus on fund raising and start-ups with a Special meeting on Innovative startups and entrepreneurs organized by R8 Director Elect Vincenzo Piuri and the R8 Conference Committee representative Tiziana Tambosso. The meeting involved John Matogo, R8 Action for Industry Committee Chair, and Mohammad Zidan of R8 Entrepreneurship Initiative. A pitch competition was organized for the start-ups.

Activities since the last report

Highlight some of the activities in your Section, with special attention to the things that work well, and things that don't, so that your acquired know-how can be used by other Sections.

Every year the SB meet together at least one time at the Italy Section conference RTSI and exchange experiences and best practices in the framework of a “Best video pitch” competition. The video pitch format encourages synthesis in presentation and let the SB think seriously at what they do and what to put under spotlight. A similar competition is carried out among the students at any meeting opportunity. For example we had a best research pitch competition at MELECON 2020 and RTSI 2021, with a good success and a participation for RTSI 2021 of about 40 attendees, although it was a virtual session.

The Italy Section organizes a Summer School on Information Engineering (SSIE) every year. This year the SSIE was organized online with the collaboration of University of Padua from 12 to 16 July. That was a special edition featuring 24 top-level speakers who gave lectures and seminars. The school featured two tracks (machine learning and applications and electronics), two plenary speeches and a half-day student workshop, where PhD students had an opportunity of presenting their technical work. SSIE 2021 explored timely and cutting edge research areas, including, machine learning techniques, energy efficient electronics and ICT applications. For more information you could refer to the web site <https://ssie.dei.unipd.it/>.

The other main activities carried out since the last report have been described in the previous sections: the organization of RTSI 2021 and AIM 2021 and the dedication of the Milestones.

Finally we organized the Italy Section Awards Ceremony 2021 during the IEEE day on the 5th of October, comprising a lecture of the Honorary Award 2021 Prof. Sangiovanni-Vincentelli titled “From Transistors to Systems: The Evolution of Design Methods and Tools in the last 40 Years”.

Planned activities

Highlight some of the future activities and initiatives in your Section.

We are organizing the 9th milestone dedication ceremony on Dec. 15, 2021 and we have one more milestone proposal in progress. We are in the middle of organization of MELECON 2022, which will be held in Palermo on the next year, and we are starting the organization of EUROCON 2023. A small working group has been formed to study the possibility of organizing hybrid conferences to provide IEEE with suggestions pros and cons.

How Region 8 can be of help to your Section, members, and activities

List any challenges you Section is facing and what support is required from the Region 8. Please, also, give us your suggestions for agenda items that you want to be discussed during the R8 Committee meeting.

The Section is facing the effect of two-year COVID-19 fatigue with a slight decrease of activities due to the tiredness of virtual events. The countermeasures up to now have been limited to increased pushing on the most active members and Chapter Chairs with a discrete success in organizing pure virtual events. The transition to new normality is still in progress as the details of new normality are not clear. There is an inertia against the abrupt return to 100% in presence meetings because the international travel regulations are not stable enough and there is some worry about the safety of national and international travels. IEEE in general and Region 8 in particular could help taking the whole risks related to the travels, especially coming from unexpected travel cancellations, quarantines, hospitalizations due to COVID-19.

Any other issues of interest