CNR-IASPEI

Activities' Report - Year 2022

Warner Marzocchi

1. Introduction

IASPEI (International Association of Seismology and Physics of the Earth Interior) promotes the study of the structure, properties and processes that occur inside the Earth and is one of the eight associations of the International Union of Geodesy and Geophysics (IUGG). IASPEI organizes its General Assemblies every four years, jointly with the ordinary General Assembly of IUGG. In the interval between its General Assemblies, IASPEI organizes its Scientific Assembly, often together with one of the other IUGG associations. In 2019 the IASPEI General Assembly was held in Montreal (Canada) and the next one will be held in Berlin in 2023. Currently the President of IASPEI is Prof. Kenji Satake (University of Tokyo, Japan), while the Secretary General is the Dr. Johannes Schweitzer from NORSAR (Norway).

2. Main activities carried on by IASPEI during 2022 relevant for Italy and for CNR

After the SARS-CoV-2 pandemic, the activities of IASPEI and other associations are slowly returning to the rhythms they had before the pandemic. It should be remembered that, unlike some other associations, there is no Italian equivalent of IASPEI, so the activities of the Italian community in this area are rather fragmented and poorly coordinated even if they have a great overall impact. For example, the Italian seismological community remains a point of reference in many activities as evidenced by the active participation in many face-to-face meetings. Among these we point out those of interest to IASPEI, in which there has been a significant participation and/or organization of the Italian community:

- EGU General Assembly, Vienna, 23-27 May 2022. The Italian community participated in the organization of various sessions of interest to IASPEI
- Seismological Society of America meeting, April 19-23, 2022, Bellevue Washington.
- American Geophysical Union meeting, Chicago December 12-16, 2022.
- XII Statistical Seismology International conference, October 17-21, 2022.
- Italian Geological Society, Turin, 19-21 September 2022.
- Meeting of the Mediterranean Ophiolite Working Group (GLOM), Milan, 4 February 2022

3. Activities carried on by Warner Marzocchi within the Union during 2021 and impact on the Italian scientific community

The undersigned was appointed representative of IASPEI in February 2019 (provision of the President of the CNR n. 11/2019 of 11.02.2019 prot. 0009953) and renewed for the three-year period 2023-2026 with provision of the President of the CNR n. 40/2023 of 3 April 2023, prot. 0099637). I was later appointed secretary of the commission.

As previously mentioned, I reiterate that the activities of the Italian community within IASPEI are rather disjointed since, compared to other associations, we do not have a section of IASPEI-Italy. In 2022, my activities as the Italian representative of IASPEI were mainly oriented towards the participation, with coordination of the Working package, in the European project H2020 RISE, aimed at developing models and tools for Operational Earthquake Forecasting and at estimating damages in time almost-real after an earthquake. I participated in the reviewer panel for the development of seismic hazard models of New Zealand and the United States. I also participated together with other Italian researchers in the discussion for

the organization of the nascent European center for seismic hazard and risk (EFEHR). Italian researchers continue to be directly and managerially involved in the development of the EPOS infrastructure financed by the European community.

4. Evaluation of the participation in terms of benefits and membership cost

IASPEI is one of the most important organizations in the field of seismology. Italy is a country with significant seismic activity, so it is essential that the Italian community continues to have a strong participation in this association, even if it continues to take place in a disjointed way and driven by individual researchers or groups.

5. Evaluation of Italians' attendance and how to improve interest and involvement

In addition to the General Assemblies, IASPEI organizes various thematic workshops, which focus on topics specific to seismology and physics of the Earth's interior. Among the various commissions that refer to IASPEI, there is also the European Seismological Commission (ESC) which historically sees a large and motivated Italian participation.

Since its inception, the activity of Italian researchers in IASPEI has always been very intense and of a high scientific level. Italy has a consolidated tradition in research in the field of seismology and Earth physics, which is demonstrated both in the acquisition of high-quality geophysical data, and in their analysis and interpretation to determine the physical processes that govern the dynamics of the Earth interiors and earthquakes. Italy is a country characterized by high seismicity and the seismic monitoring networks are modern and of high quality and allow the collection of data and observations both for the understanding of the physical processes and to support the civil protection system for the management of emergencies.

Although IASPEI meetings are generally well attended by Italian researchers, the link between Italian scientists and IASPEI is mostly associated with this. Building an important and more continuous link between the activities of IASPEI and the Italian community should be an important future task.

6. Italian experts with important roles within the Union or within related Commissions and Programs (if known)

In the IASPEI organization, nobody I know of.

7. If Union with CNR Commission, short summary about the 2021 CNR Commission activities No.

8. Notes (if any)

No.

9. Conclusions

I would like to reiterate, once again, the importance of having a strong Italian participation within IASPEI. It is important to strengthen this bond in addition to participation in meetings organized by IASPEI

Signature

Place and date: Rome, June 4, 2022	