



International Union of Soil Sciences

100 years of IUSS

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Salute del suolo e sostenibilità: la parola agli stakeholder
22 aprile 2024
Sala Emeroteca - Collegio Romano - Roma

The foundation



The establishment of the International Society of Soil Science (ISSS) occurred during the Fourth International Conference of Pedology in Rome on May 19, 1924, in the International Agriculture Institute housed in Villa Lubin.



The founders



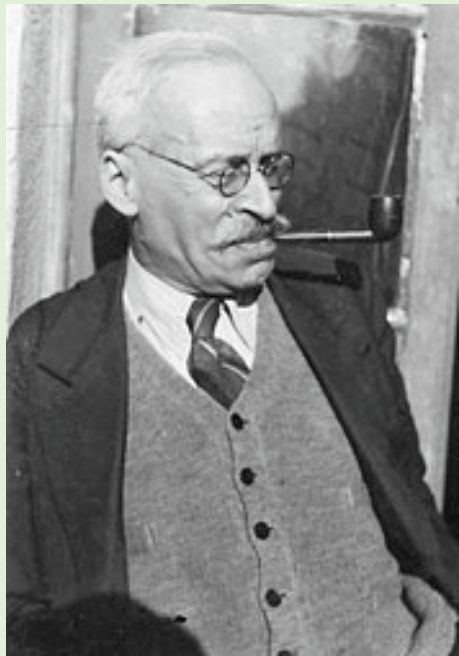
- Patronage of the Ministry of Economy, the President of the Council of Ministers, and the King of Italy, who attended the opening ceremony.
- 463 adherents: 21 official delegations, 3 governments without official representation, 303 members from 39 countries, 120 scientific Institutions, and 16 economic and industrial institutions.

1. Italy 122
2. Germany 47
3. Czechoslovakia 46
4. Hungary 23
5. Great Britain and Ireland 20
6. Russia 20
7. the Netherlands, 18
8. Romania 17
9. the United States 16
10. Sweden 14
11. Switzerland 4
12. Poland 12
13. Denmark 11

14. France 10
15. Belgium 8
16. Egypt and Soudan 7
17. Dutch East Indies and Ceylon 6
18. Finland 5
19. Japan 5
20. British Indies 5
21. Austria 4
22. Greece 4
23. Norway 4
24. New Zealand 4
25. Argentine 3
26. South Africa 3

27. Dantzig 2 (Gdansk)
28. Peru 2
29. Principate of Monaco 1
30. Yugoslavia 1
31. Latvia 1
32. Malte 1
33. Macao 1
34. Palestine 1
35. Portugal 1
36. Puerto Rico 1
37. Rhodesia 1
38. Sierra Leone 1
39. Uruguay 1

The protagonists



Paolo Vinassa de Regny



Giacchino De Angelis D'Ossat

The developments: from the ISSS to the IUSS



- In 1924, a Secretary General was elected and a President from the hosting country of the next WCSS
- In 1998, new Statutes and name were declared at the 16th Congress in Montpellier decoupling the position of the president from the organization of the World Congress of Soil Science.
- The IUSS has an elected president who serves for 6 years (2 years as President-Elect, 2 years as President and 2 years as Past President) and a Vice President WCSS.
- The IUSS continued to have a Secretary General and a Deputy Secretary General until 2014.
- From 2015 to 2022, the IUSS had a permanent secretariat based in Vienna, and since 2023 in Rome.
- The scientific duties have been taken over by the presidential committee, whereas the administrative duties are handled by the secretariat.
- Six commissions were established in 1924: (I) soil physics, (II) soil chemistry, (III) soil biology, (IV) nomenclature and classification of soils, (V) soil cartography and (VI) plant physiology in relation to pedology.

The ISSS-IUSS Presidents, Secretaries General and Secretariats

	Country	President	Period
1	USA	J.G. Lipman	1924-1927
2	USSR	K. Gedroiz	1927-1930
3	UK	J. Russell	1930-1935
4	Netherlands	C.H. Edelman	1950
5	Belgium	R. Tavernier	1950-1954
6	France	A. Oudin	1954-1956
7	USA	R. Bradfield	1956-1960
8	Romania	N.C. Cernescu	1960-1964
9	Australia	E.G. Hallsworth	1964-1968
10	USSR	V.A. Kovda	1968-1974
11	Canada	C.F. Bentley	1974-1978
12	India	J.S. Kanwar	1978-1982
13	Germany	K.H. Hartge	1982-1986
14	Japan	A. Tanaka	1986-1990
15	Mexico	A.A. Santelises	1990-1994
16	France	A. Ruellan	1994-1998
17	Thailand	S. Theerawong	1998-2002
18	USA	D.L. Sparks	2002-2006
19	Australia	R.S. Swift	2006-2010
20	Korea	J.E. Yang	2010-2014
21	Germany	R. Horn	2014-2016
22	USA	R. Lal	2017-2018
23	Japan	T. Kosaki	2019-2020
24	Mexico	L.B.R. Sánchez	2021-2022
25	Italy	E.A.C. Costantini	2023-2024

Secretary General	Country	Period
D.J. Hissink	Netherlands	1924-1950
F.A. van Baren	Netherlands	1950-1974
R. Dudal	Belgium	1974-1978
W.G. Sombroek	Netherlands	1978-1990
W.E.H. Blum	Austria	1990-2002
S. Nortcliff	UK	2002-2010
A.E. Hartemink	Netherlands	2010-2014
Secretariat	Country	Period
Umweltbundesamt	Austria	2015-2022
CREA	Italy	2023-

The structure



- The IUSS is a free and autonomous organization, financed primarily by member contributions, providing a reputation for soil scientists and a collaborative space.
- The IUSS is based on two pillars:
 - it is a union of national societies or academies (the Full members),
 - it is an organization of soil scientists (the Individual members).

The IUSS Full and Individual Members



- The Full members of the IUSS are 76 National Soil Science Societies or Academia.
- The estimated Individual members (through the National Soil Science Societies) is about 50,000
- The IUSS holds relationships with 8 regional societies:

African Soil Science Society (ASSS),

East and Southeast Asia Federation of Soil Science Societies (ESAFS),

European Confederation of Soil Science Societies (ECSSS),

Federation of Eurasian Soil Science Societies (FESSS),

Latin American Soil Science Society (SLCS),

Soil Science Society of East Africa (SSSEA),

Pacific Regional Society of Soil Science (PRSSS),

Central Asian Soil Science Society (CASSS)

The IUSS Structure



- Governance: the Council, the Executive and President's Committees, the Secretariat, responsible for management.
- Science: 4 Divisions, 21 Commissions, 17 WGs, and the Forum.

Division 1 – Soils in Space and Time

- C1.1 Soil morphology and micromorphology
- C1.2 Soil geography
- C1.3 Soil genesis
- C1.4 Soil classification
- C1.5 Pedometrics
- C1.6 Paleopedology

Division 2 – Soil Properties and Processes

- C2.1 Soil physics
- C2.2 Soil chemistry
- C2.3 Soil biology
- C2.4 Soil mineralogy
- C2.5 Soil chemical, physical and biological interfacial reactions

The IUSS Structure



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Division 3 – Soil Use and Management

C3.1 Soil evaluation and land use planning

C3.2 Soil and water conservation

C3.3 Soil fertility and plant nutrition

C3.4 Soil engineering and technology

C3.5 Soil degradation control, remediation, and reclamation

C3.6 Salt-affected soils

C3.7 Soils of Urban, Industrial, Traffic, Mining and Military Areas (SUITMA)

Division 4 – The Role of Soils in Sustaining Society and the Environment

C4.1 Soil and the environment

C4.2 Soil, food security, and human health

C4.3 Soil and land use change

C4.4 Soil education and public awareness

C4.5 History, philosophy, and sociology of soil science

The IUSS WGs



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Division 1

1. Cryosols
2. Digital Soil Mapping
3. Digital Soil Morphometrics
4. Global Soil Map
5. Proximal Soil Sensing
6. Soil Information Standards
7. Soil Monitoring
8. Universal Soil Classification
9. World Reference Base

Division 2

1. Hydropedology
2. International Soil Modeling Consortium

Division 3

1. Acid Sulphate Soils
2. Forest Soils
3. Paddy Soils

Division 4

1. Cultural Patterns of Soil Understanding
2. Young and Early Career Scientists

The IUSS main outputs

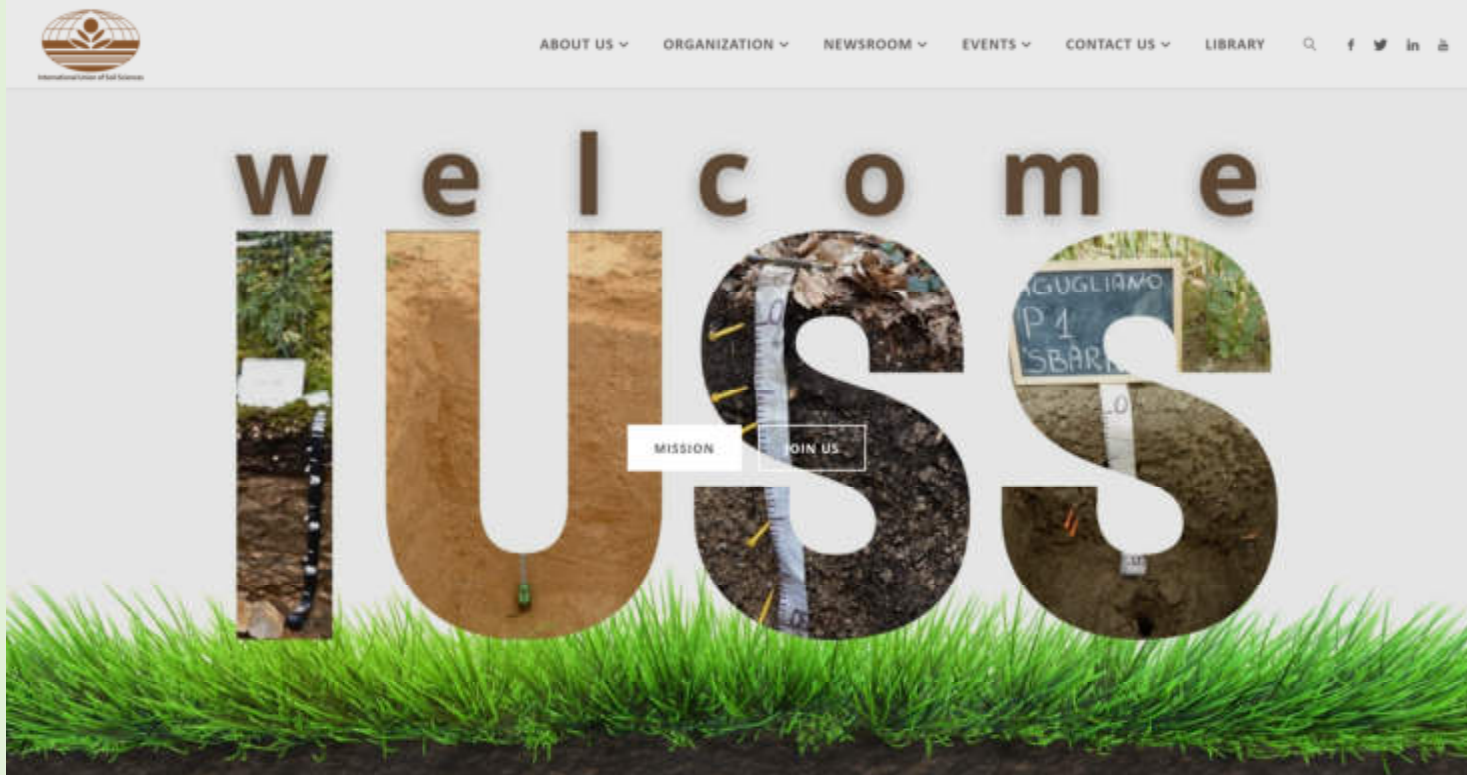


- every 4 years: WCSS + 1 inter-congress
- special congress: Centennial
- Every year:
 - 40-80 main scientific events organized by Divisions, Commissions and WGs
 - Over 2000 events organized for the World Soil Day on the 5th of December, in collaboration with the FAO
 - 2 Bulletins and 12 Alerts
 - 1-2 Books, also open source
- Awards and prizes:
 - the Dokuchaev Award and Von Liebig Award, for basic and applied researches;
 - the Jeju Award for young and mid-career soil scientist;
 - the IUSS Distinguished Service Medal, for outstanding world soil leaders who have translated soil science into action;
- Honorary members
- Promotion of individual member by other scientific organization, such as the ISC
- IUSS Stimulus Fund and projects

The IUSS Website and Social Media



<https://www.iuss.org/>



- Facebook: <https://www.facebook.com/unionsoilsciences>
- LinkedIn: IUSS-International Union of Soil Sciences @LinkedIn.com
- X: International Union of Soil Sciences @IUSS_ORG
- YouTube: @iusschannel822

The WCSS

1. 1927 - Washington DC
2. 1930 - Leningrad
3. 1935 - Oxford
4. 1950 - Amsterdam
5. 1954 - Leopoldville
6. 1956 - Paris
7. 1960 - Madison
8. 1964 - Bucharest
9. 1968 - Adelaide
10. 1974 - Moscow
11. 1978 - Alberta
12. 1982 - New Delhi
13. 1986 - Hamburg
14. 1990 - Kyoto
15. 1994 - Acapulco
16. 1998 - Montpellier
17. 2002 - Bangkok
18. 2006 - Brisbane
19. 2010 - Philadelphia
20. 2014 - Seoul
21. 2018 - Rio de Janeiro
22. 2022 - Glasgow

1924 - 4th Pedological Congress – Rome
2024 - Centennial Congress – Florence



International Union of Soil Science



Centennial
of the IUSS
Florence - Italy
May 19 - 21, 2024

www.centennialiuiss2024.org

General themes

- Soil health in achieving the Sustainable Development Goals
- Soil governance
- Soil in the circular economy
- Soil sciences impact on basic knowledge
- Soil in the digital era
- Soil and the human society
- Equity, diversity and inclusivity in soil sciences

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Organizing Secretariat



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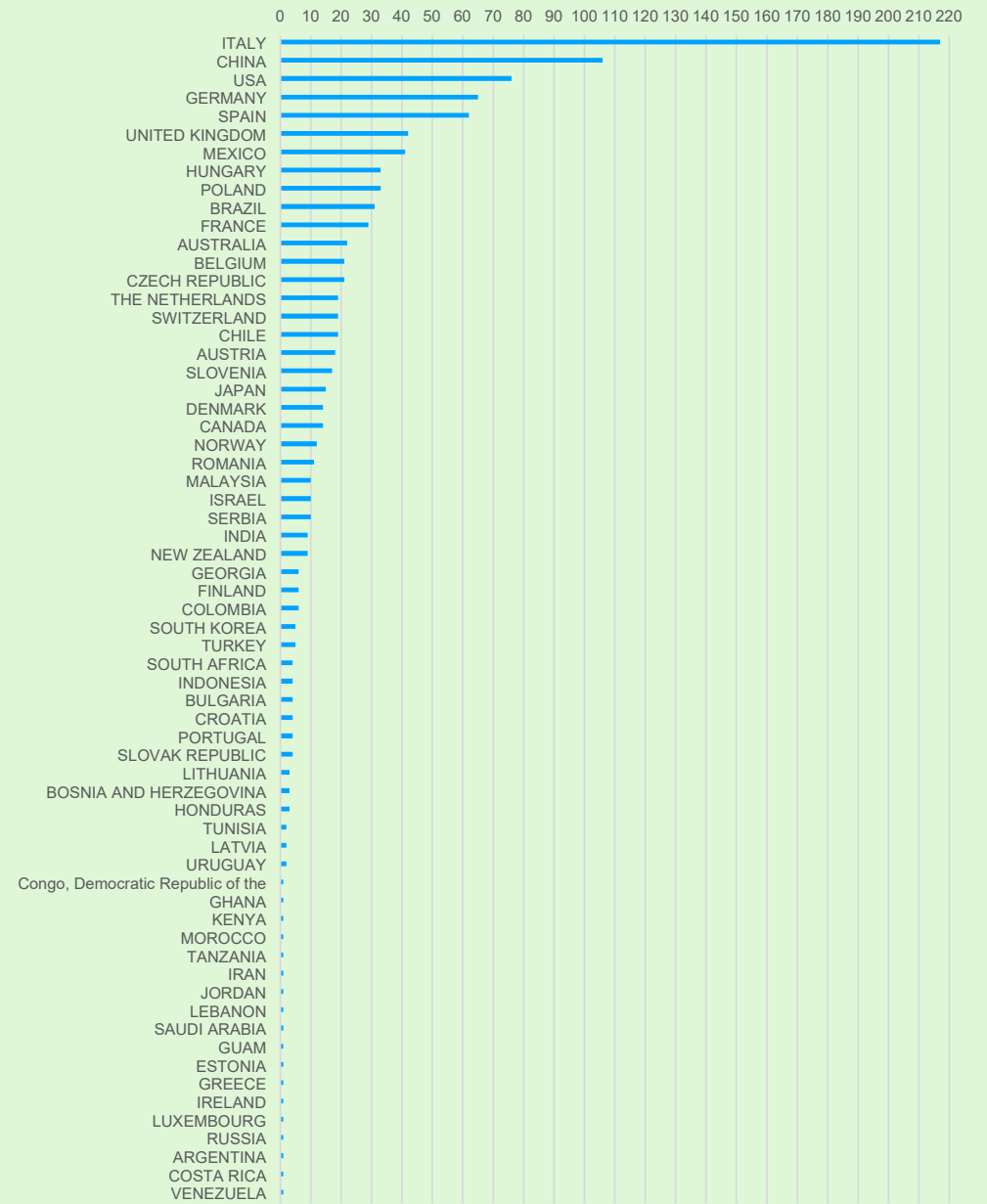
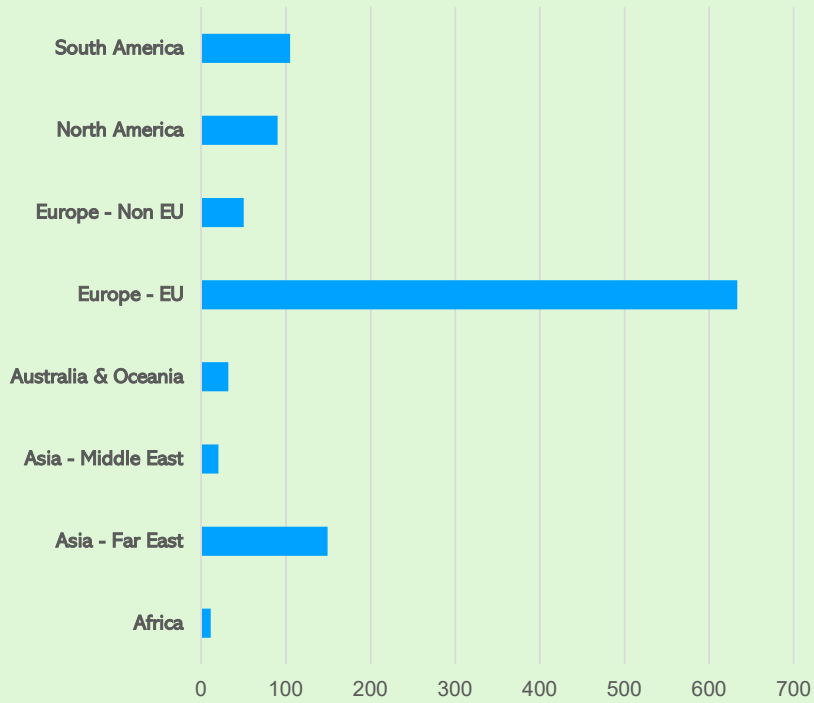


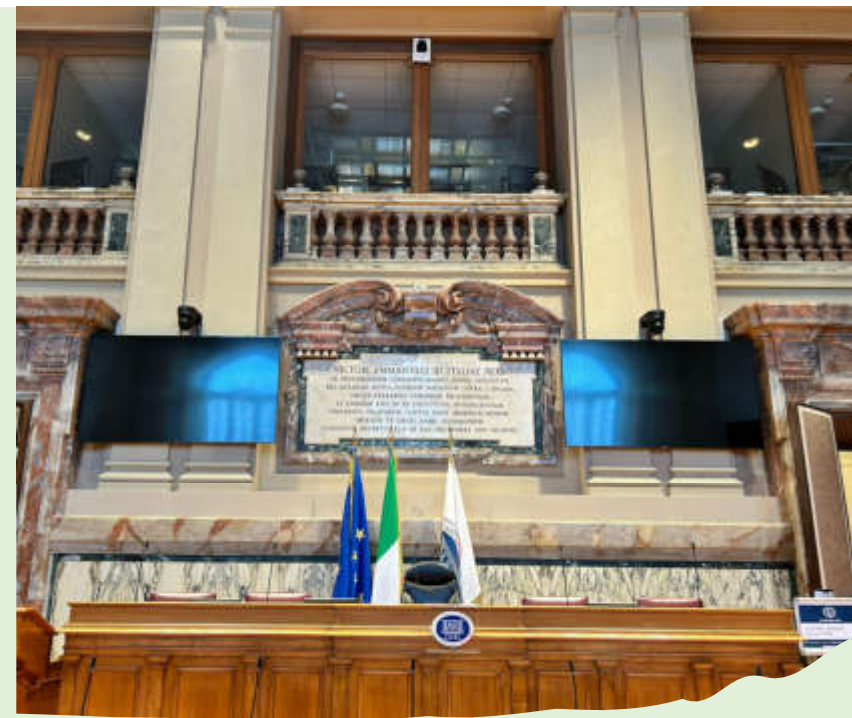
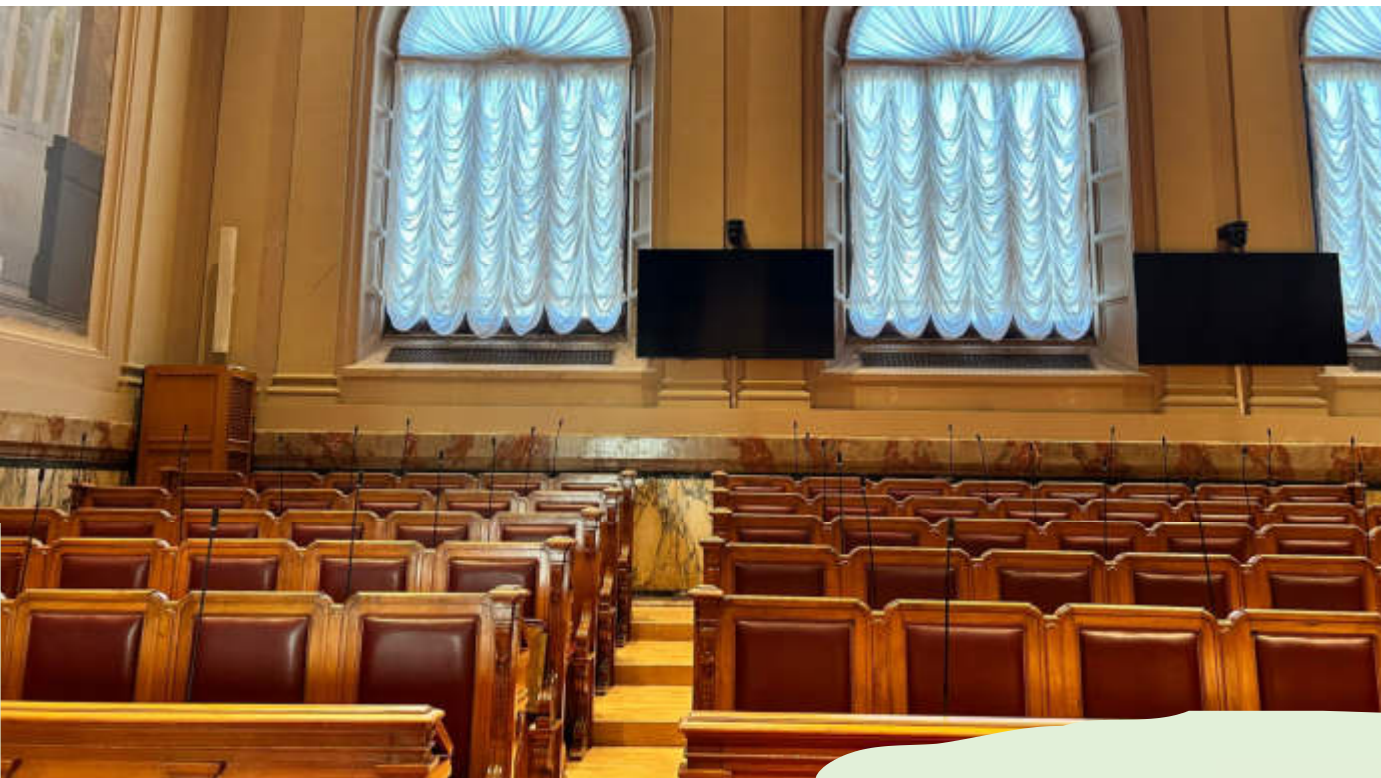
State of the art

- 94 sessions
- 1500 abstracts
- Already 1100 registrations,
- Satellite symposia and Workshops
- Stands
- Excursions
- Video in Villa Lubin

64 countries

Sum of Participants by Continent





Long live the IUSS!