Young Professionals

IEEE NPSS – 2025 School on Nuclear Instrumentation and Applications for Society

IEEE youngprofessionals

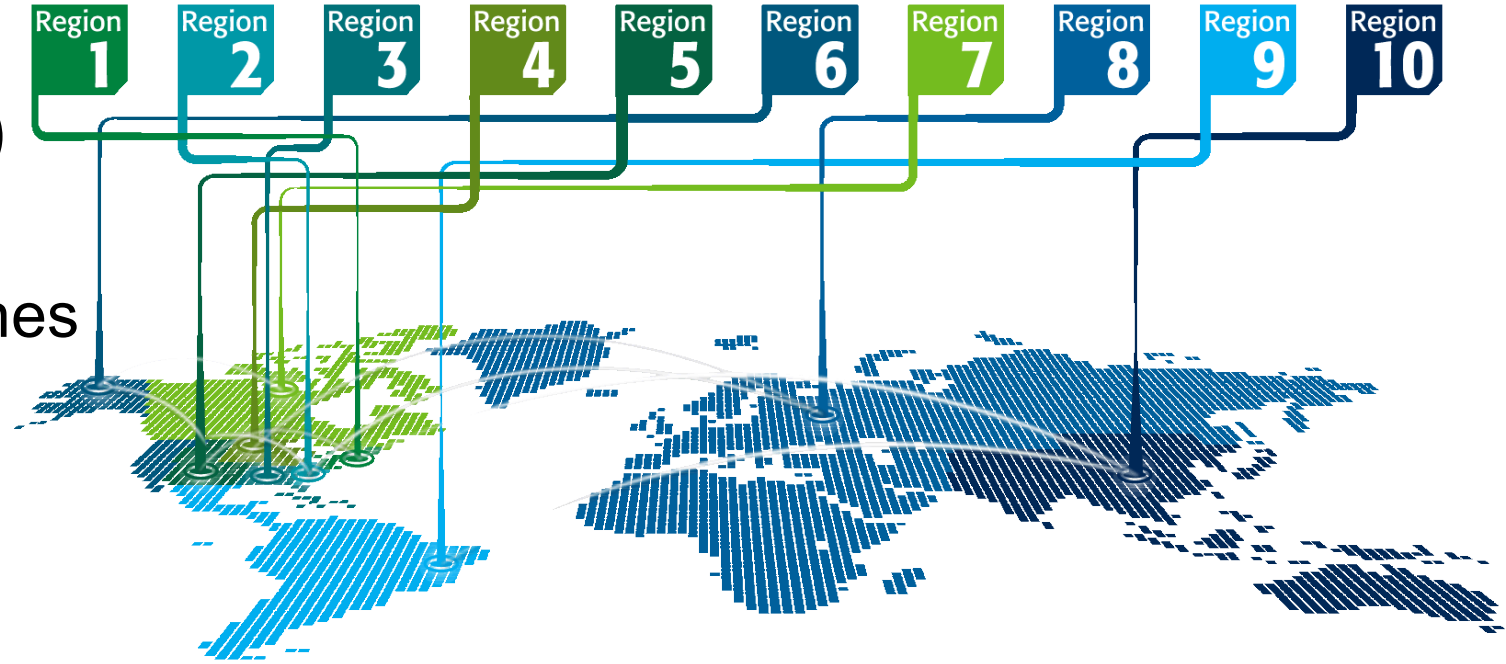
IEEE Advancing Technology for Humanity

Srilalan Krishnamoorthy
University of Pennsylvania
(srilalan@pennmedicine.upenn.edu)

IEEE NPSS NUCLEAR & PLASMA SCIENCES SOCIETY

IEEE – “world’s largest technical professional organization”

- Approaching **500,000** members in over **160** countries (global scope)
- Across many engineering, computing & technology disciplines
- **39** Technical Societies and **7** Technical Councils
- Publishes approximately **200** transactions, journals, and magazines



- Over **5 million** documents in IEEE *Xplore*® with >**15 million** downloads/month
- Sponsors more than **1,900** conferences in **96** countries each year

IEEE Societies

- Aerospace and Electronic Systems Society
- Antennas and Propagation Society
- Broadcast Technology Society
- Circuits and Systems Society
- Communications Society
- Computational Intelligence Society
- Computer Society
- Consumer Technology Society
- Control Systems Society
- Dielectrics and Electrical Insulation Society
- Education Society
- Electromagnetic Compatibility Society
- Electron Devices Society
- Electronics Packaging Society
- Engineering in Medicine and Biology Society
- Geoscience and Remote Sensing Society
- Industrial Electronics Society
- Industry Applications Society
- Information Theory Society
- Instrumentation and Measurement Society
- Intelligent Transportation Systems Society
- Magnetics Society
- Microwave Theory and Techniques Society
- Nuclear and Plasma Sciences Society
- Oceanic Engineering Society
- Photonics Society
- Power Electronics Society
- Power & Energy Society
- Product Safety Engineering Society
- Professional Communication Society
- Reliability Society
- Robotics and Automation Society
- Signal Processing Society
- Society on Social Implications of Technology
- Solid-State Circuits Society
- Systems, Man, and Cybernetics Society
- Technology and Engineering Management Society
- Ultrasonics, Ferroelectrics, and Frequency Control Society
- Vehicular Technology Society

* As of October 2022

Technical Councils are groups of Societies working together in broad areas of technology

1. Biometrics Council
2. Council on Electronic Design Automation
3. Council on RFID
4. Council on Superconductivity
5. **Nanotechnology Council**
6. Sensors Council
7. Systems Council

IEEE Biometrics Council

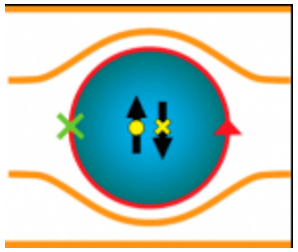
IEEE Sensors Council

RFID IEEE Council on RFID Bridging the physical to the digital

IEEE Systems Council

CEDA IEEE Council on Electronic Design Automation

IEEE NANO



* As of October 2022

Technical Communities

Communities around particular technology challenges or cutting-edge subject areas and nurtures them through a defined 'start-up' period

1. Big Data Community
2. Blockchain Community
3. **Brain Community**
4. Digital Reality Community
5. Entrepreneurship Exchange Community
6. Environmental Engineering Community
7. Future Networks Community
8. Global Earth Observing System of Systems Community
9. International Roadmap for Devices & Systems Community
10. Internet of Things Community
11. Life Sciences Community
12. Micro Electro Mechanical Systems Community
13. Public Safety Technology Community
14. Quantum Community
15. Smart Cities Community
16. Smart Grid Community
17. Software Defined Networks Community
18. Sustainable ICT Community
19. TechEthics Community
20. Transportation Electrification Community

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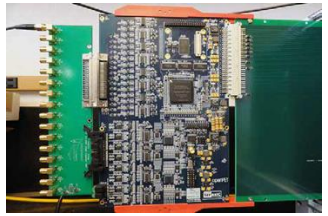
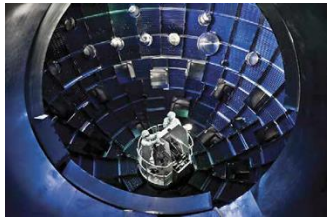
Technical Areas within NPSS



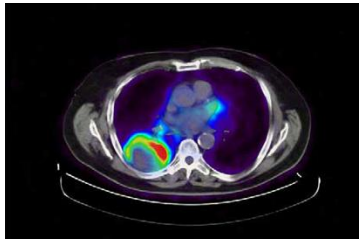
Computer Applications in Nuclear and Plasma Science (CANPS)

Computer systems, HW and SW aspects of data acquisition/analysis/storage/control in all NPSS disciplines



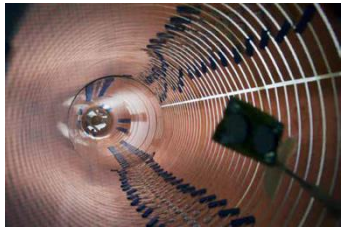
Fusion Technology Committee (FTC)

Science and technology to harness the power of the stars



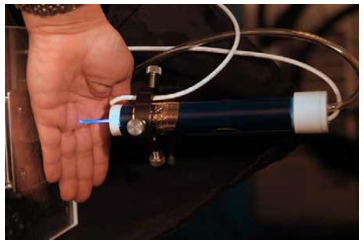
Nuclear Medical & Imaging Sciences Committee (NMISC)

We advance nuclear medicine science through technological innovation



Particle Accelerator Science and Technology Committee (PAST)

Design, construct, & operate particle accelerators supporting research, industrial, & societal needs

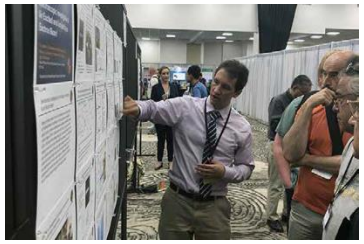


Plasma Science and Applications Committee (PSAC)

Explores the science & technology associated with the collective interactions of electromagnetic fields and plasma

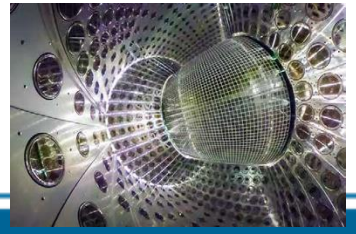
Pulsed Power Science and Technology Committee (PPST)

We produce high peak power to achieve unique sources and study fundamental physics



Radiation Effects Committee (REC)

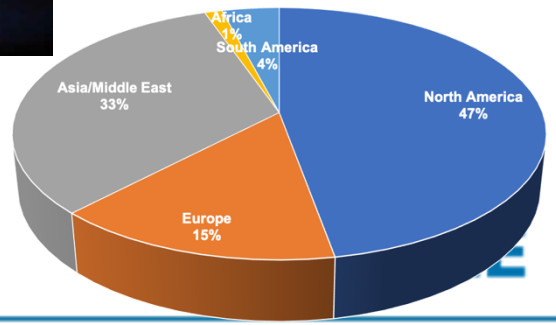
We strive to advance, apply, and disseminate radiation effects research



Radiation Instrumentation Technical Committee (RITC)

Radiation Instrumentation A to Z

~3,000 members in 80 countries



“Where Students and Young Professionals Come to Connect and be Inspired”

IEEE Rising Stars is designed to inform, excite, enthuse, and enlighten the top engineering young professionals and students. Over the course of 3 days, featuring 40+ expert speakers, attendees will obtain direction and perspective into potential career paths as they learn about emerging technologies and connect with industry professionals and executives.

YP Mission statement

Young Professionals are defined as post-Student members who are within 15 years* of receiving their first professional degree

- Main objective - Organize activities beneficial to the younger members of the community
- Millennial's (YPs) have different goals, challenges and preferences
- What do YPs seek? How does society add value?

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Young Professional Event

"Learn about how to publish successfully"

Wednesday night, June 18th, 2025

6:30 to 9:00 pm

Professor Edl Schamiloglu, the Editor in Chief of IEEE Transactions on Plasma Science, will discuss "How to Publish Successfully"

Food and informal discussion after the talk

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