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**Theme**

OTHER - Topics relevant to Arctic Observing

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**Poster title (brief)**

Convergence at the Poles: IEEE Brings Diverse Communities and Technical Solutions to Polar Challenges

**Abstract - text box**

The Poles represent the ideal point of convergence for people, technology, and vision to address the challenges facing humanity. IEEE, as the world's largest technical profession organization with more than 423,000 members in over 160 countries, brings together diverse technical communities, advanced concepts and disciplines across the globe for the benefit of humanity. IEEE is actively working to identify ways in which it can most productively contribute to Polar observations since the location so closely mirrors its own mission.

The IEEE in the North and South Poles (INSP) ad hoc committee started its activities in 2017, and during its first year of existence it has already triggered and supported a number of activities that will continue in 2018:

- InuCube: a Cubesat project led by the University of Manitoba to educate, raise awareness of the challenges of the Arctic, and to perform basic Earth Observations.

- The Young Professionals in Space (YPinSpace) bootcamp to train students and recent graduates in space techniques and technologies, with

a focus on Earth Observation and in particular in cryospheric applications.

- The IEEE Geoscience and Remote Sensing Society's Student Grand Challenge: a competition of 5 international teams of students to create an end-to-end drone-based Earth Observing system and mobile phone app with focus in cryospheric applications.

- The IEEE Dataport: an on-line, perpetually free-of charge repository of data sets up to 2TB to be used for research and other scientific studies.

- A dedicated special section entitled "Addressing Economic, Environmental and Humanitarian Challenges in the Polar Regions" in IEEE Access, a new open access journal.

- The organization of the Antarctic and Southern Ocean Forum (ASOF) and the Arctic and Northern Ocean Forum (ANOF) workshops, that gather scientists, engineers and decision makers with interests in autonomous observing and other technologies including miniaturization and ruggedization, acoustics, oceanographic mooring technologies and related Data Science topics.

IEEE looks to participate in appropriate international fora in order to productively contribute to Polar observations.