

**This information was received by the ISWI Newsletter from
Dr. Vyacheslav Pilipenko (Inst. of Physics of the Earth, Russia)
on 2 November 2017**

First call for abstracts to Session ST3.6 at EGU General Assembly, Vienna, Austria, April 8 – 13 2018.
"ULF waves and turbulence in the auroral oval and polar cap regions: New horizons in multi-instrument observations"

We invite researchers in the magnetospheric community to submit abstracts to the above session.

<https://meetingorganizer.copernicus.org/EGU2018/sessionprogramme>

Deadline for abstracts: January 10th 2018

Deadline for travel support applications: 1st December 2017

https://egu2018.eu/roland_schlich_travel_support.html

Session Overview:

This session will combine the efforts and expertise of various research groups towards understanding the physics of high-latitude ULF wave phenomena (pulsations and transients with periods between seconds and tens of minutes) and their implications in the auroral oval, polar cap and cusp. The emphasis will be towards multi-instrument studies using ground magnetometers, optical imagers, ionospheric radars (SuperDARN, EISCAT), GPS receivers, HEO (e.g. MMS, ERG) and LEO (e.g. SWARM) satellites.

Existing studies have shown that the theoretical underpinning of many models developed for middle latitude phenomena turn out to be invalid at very high latitudes. A full understanding of how magnetospheric boundary domains manifest themselves in ground magnetometer/photometer/radar data at high latitudes is also still needed. The zoo of specific high-latitude ULF phenomena (such as broadband and narrow band Pc5-6 pulsations, polar cap Pc3 waves, high latitude Pi2-3 pulsations, SC/TCV/MIE transients, Pc1-2 EMIC emissions, etc.) have not been fully examined yet and the geophysical context of many ULF phenomena remains elusive. Auroral emissions associated with such high latitude pulsations further highlight the link between such phenomena and incoming accelerated particle populations and substorm activity.

Recently, new facilities for the study of specific high-latitude ULF phenomena have become available: complete coverage of both polar caps by an array of SuperDARN radars, conjugate Antarctica-Greenland magnetometer profiles, new types of optical scanning photometers and all-sky airglow cameras, a fast expanding array of GPS receivers, imaging riometers, etc. It is thus an opportune time to discuss how to use these facilities effectively and to discuss first results.

<http://meetingorganizer.copernicus.org/EGU2018/session/27249>

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