

Who we are | Join us

Announcement



Stay up to date with PYRN social media

By Dmitry Nekrasov, Evan Wilcox and Matthias Winkel

Did you know that **PYRN** is active in a variety of social media channels? Follow us now!

We use platforms like Twitter, Facebook, and Instagram to communicate news about PYRN, articles, information on events and photos.



Be part of the PYRN social media community and reach out to hundreds of permafrost enthusiasts! Use the tag <code>@pyrn_official</code> or hashtag <code>#pyrn</code> on Twitter and Instagram on to share your updates or pictures via the 'PYRN' account.

PYRN Workshop



PYRN Workshop at EUCOP5

By Florence Magnin

A 2-day Permafrost Young Researchers Network Workshop was held prior to EUCOP5 Conference on June 23rd and 24th. More than 150 young permafrost researchers from different backgrounds and based across the world attended the workshop. This event was a great opportunity for researchers to get to know each other and to develop long-lasting professional relationships!



How to write a great proposal talk by Philip Bonnaventure



Field work preparedness talk by Mélissa J. Lafrenière





Excursion to the Mont Blanc massif led by local researchers

Over the course of this 1-day indoor workshop and 1-day local excursion, 15 junior and senior speakers shared their knowledge and experience on diverse subjects ranging from scientific permafrost topics to soft skills development, and even local environmental sciences.

This workshop was also an occasion for the previous 2016-18 PYRN ExCom to reflect on the past two years of PYRN activities and pass the torch to the new PYRN 2018-20 ExCom, who are eager to help support permafrost science and promote young researchers in their activities.



ExCom renewal

By Dmitry Nekrasov

During the <u>5th European Conference on Permafrost (EUCOP 2018)</u> in Chamonix-Mont Blanc, France, (23th June - 1st July 2018), the new PYRN <u>ExCom 2018-2020 replaced the old ExCom 2016-2018</u>.



New PYRN 2018-20 Executive Committee formed during EUCOP5

PYRN Executive Committee ———						
Helena Bergstedt President	Jannik Martens Xianbing Kong Vice-President	Isabel Prater Secretary Samuel Gagnon Treasurer	Huw Mithan Council/ NR-Coordinator	Denis Frolov Webmaster Samuel Weber APECS	Han Li ICOP Dmitry Nekrasov Newsletter	Evan Wilcox Matthias Winkel Social Media Julien Fouche

Take a look at the PYRN website to learn more about the ExCom members. The PYRN ExCom is responsible to manage and lead the affairs of the network including administration, program development, supervision and recommendation of financial affairs for the next two years.



PYRN-IPA awards at the EUCOP5

By Dmitry Nekrasov and Jannik Martens

During EUCOP5, PYRN honored the best oral and poster presentations of Early Career Scientists with a PYRN-IPA Award. The best oral presentation award was awarded to **Samuel Gagnon** and the best poster presentation to **Constanza Morino**.



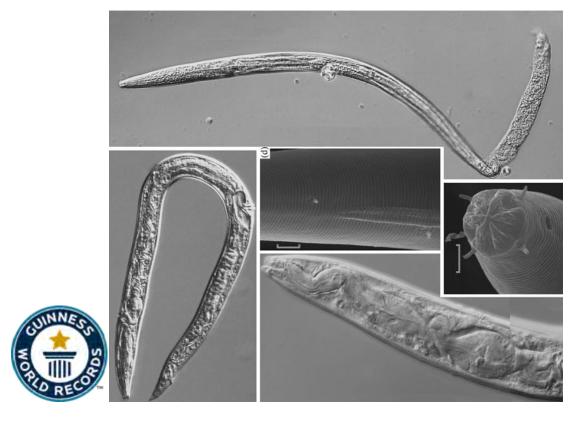
Samuel Gagnon (3rd from the left) and Constanza Morino (4th from the left) received the PYRN-IPA Awards 2018 from Hanne H. Christiansen – President of IPA (1st from the left), Helena Bergstedt – President of PYRN (2nd from the left and Jannik Martens – Vice-President of PYRN (5th from the left)



Longest animal cryobiosis

By Alexey Lupachev

As reported in the journal <u>Doklady Biological Sciences</u> in May 2018, **nematodes of two species (roundworm)** – Panagrolaimus aff. detritophagus and Plectus aff. parvus – sampled from frozen Arctic permafrost with a radiocarbon age of about 41,000–42,400 years **were reanimated after several weeks of cultivation in a lab.**



The nematodes were collected in 2015 near the Alazeya River in the Siberian region of Yakutia, north-eastern Russia, and are presumed to be of a similar age to the permafrost they were found in.

Nematodes are microscopic roundworms that can inhabit a broad range of environments, including deep below the Earth's surface. The surviving prehistoric insects were drawn from ancient rodent burrows in the Duvanny Yar outcrop in northeast Siberia and from ice deposits near the Alazeya River in the Yakutia region. They were stored in petri dishes at -20 degrees Celsius in a lab before being slowly thawed over several weeks.

The research was conducted as part of a collaborative effort between Moscow State University, the Higher School of Economics in Moscow, the Russian Academy of Sciences in Moscow Oblast, and Princeton University in New Jersey.



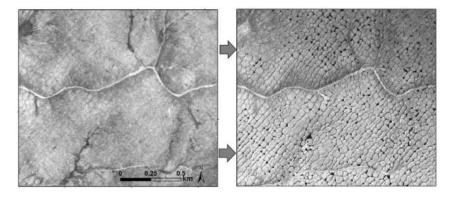
The most viewed Permafrost Article of the Day (Summer 2018)

By Evan Wilcox and Matthias Winkel

The most viewed, retweeted and liked <u>#APermafrostPaperADay</u> in summer 2018 was "<u>Climate Sensitivity of High Arctic Permafrost Terrain Demonstrated by Widespread Ice-Wedge Thermokarst on Banks Island</u>" by Robert H. Fraser et al.

Abstract

Ice-wedge networks underlie polygonal terrain and comprise the most widespread form of massive ground ice in continuous permafrost. Here, we show that climate-driven thaw of hilltop ice-wedge networks is rapidly transforming uplands across Banks Island in the Canadian Arctic Archipelago. Change detection using highresolution WorldView images and historical air photos, coupled with 32-year Landsat reflectance trends, indicate broad-scale increases in ponding from ice-wedge thaw on hilltops, which has significantly affected at least 1500 km2 of Banks Island and over 3.5% of the total upland area. Trajectories of change associated with this upland ice-wedge thermokarst include increased micro-relief, development of high-centred polygons, and, in areas of poor drainage, ponding and potential initiation of thaw lakes. Millennia of cooling climate have favoured ice-wedge growth, and an absence of ecosystem disturbance combined with surface denudation by solifluction has produced high Arctic uplands and slopes underlain by ice-wedge networks truncated at the permafrost table. The thin veneer of thermally-conductive mineral soils strongly links Arctic upland activelayer responses to summer warming. For these reasons, widespread and intense ice-wedge thermokarst on Arctic hilltops and slopes contrast more muted responses to warming reported in low and subarctic environments. Increasing field evidence of thermokarst highlights the inherent climate sensitivity of the Arctic permafrost terrain and the need for integrated approaches to monitor change and investigate the cascade of environmental consequences. View Full-Text



Keywords: permafrost; climate change; ice-wedge polygons; Landsat; Banks Island; Arctic; terrain sensitivity

Instagram **Updates**



Recent posts from **PYRN** on **Instagram**

By Dmitry Nekrasov





pyrn_official Looking at the Mont-Blanc, understanding the landscape dynamics thanks to wonderful explanations given by Marco Giardino, Delphine Six, Johan Berthet, Florence Magnin, Pierre-Alain Duvillard, Jacques Mouret #pyrn #chamonix #permafrost #eucop5

mishiemaes Neat! johnkingsleyemey Amazing site







pyrn_official Flashback to the icebreaker at #EUCOP5. Lets see your #pyrn fieldwork photos from this summer so far!





Follow us, tag us @pyrn_official and use hashtag #pyrn to spread your science snapshots around the community!



INTERACT project

By Evan Wilcox

Looking for funding to get to an Arctic field site or for someone else to collect field data for you? Here is a great opportunity:

"The INTERACT project under EU H2020 provides altogether 7800 person-days of Transnational Access (both physical and remote) in 2016-2020. Access is offered to 43 research stations located in the Arctic"



The deadline to apply is October 12th, 2018!

Join the on-line webinar on September 11th at 15:00 CEST

https://eu-interact.org/interact-transnational-access-call-is-open/"





GeoEdmonton 2018,

23-26 September, Edmonton, AB, Canada.

Main Conference topics: Transportation, Geotechnics, Hydrogeology etc.

More information can be found at http://www.geoedmonton2018.ca/

ACUNS Student Conference 2018,

1-3 November, Edmonton, AB, Canada.

Main Conference topics: Landscapes of northern knowledge: Peoples, Animals, and Environments etc.

More information can be found at http://www.acuns18.ca

AGU fall meeting 2018,

10-14 December, Washington, D.C., USA.

Main Conference topics: Cryosphere, Geophysics, Paleoclimatology, Planetary Sciences etc.

More information can be found at https://fallmeeting.agu.org/2018/

ArcticNet annual scientific meeting 2018,

10-14 December, Ottawa, Ontario, Canada.

Main Conference topics: Marine system, Terrestrial system, Northern policy and sustainable development etc.

More information can be found at http://www.arcticnetmeetings.ca/asm2018/index.php

International conference "Solving the Puzzles from Cryosphere" 2019,

15-18 April, Pushchino, Russia.

Main Conference topics: Geocryology, Paleoreconstructions, Permafrost soils, Permafrost hydrology etc.

More information can be found at http://cryosol.ru/en/cryoconference2019en.html

4rd International Symposium on Transportation Soil Engineering in Cold Regions 2019, 20-23 May, St. Petersburg, Russia.

Main Conference topics: Transportation infrastructure in Arctic and cold regions, Soil dynamics, Stability of slopes, landslides, debris flows and avalanches, frost heave, permafrost dynamics in changing climate etc.

More information can be found at http://conf-geotech.wixsite.com/transoilcold2019

18th International Conference on Cold Regions Engineering and 8th Canadian Permafrost Conference 2019,

18-22 August, Quebec City, Quebec, Canada.

Main Conference topics: Sustainable infrastructure development in a changing cold environment etc.

More information can be found at http://iccre-cpc2019.com/





28 PhD positions within the Doctoral Programme, TALENT at the Faculty of Science, University of Copenhagen

By Jannik Martens

28 PhD positions within the Doctoral Programme, TALENT at the Faculty of Science, University of Copenhagen - co-funded by the European Union's Horizon 2020 research and innovation programme under the Marie Skłodowska-Curie grant agreement No 801199.

The 28 PhD fellowships are in the following fields:

Biodiversity; biological sciences and bioinformatics; chemical sciences; computer sciences; earth and planetary systems sciences; environment, climate and sustainability; food sciences; health and genomics; mathematical sciences, statistics & economics; nano and materials sciences; natural science education; nutrition and sports; particle physics, astrophysics and cosmology; plant sciences and biotechnology; quantum sciences and technology; resource economics and global development.

More information can be found at https://employment.ku.dk/phd/?show=147557

10th Research Opportunities Week at the Technical University of Munich

By Samuel Weber

Once a year the Technical University of Munich (TUM) selects 50 young scientists from all over the world and invites them to the Research Opportunities Week (ROW) in Munich. During this week, the participants have the opportunity to visit different research facilities at TUM, to meet Professors of their disciplines, to inform themselves about possible postdoc funding opportunities in Germany and to create a scientific network.

The Postdoc Mobility Travel Grant covers accommodation and travel expenses and thus funds the stay in full. After the ROW, the participants get the exclusive chance to apply for the attractive TUM University Foundation Fellowship (TUFF) and to spend one year as a postdoc at TUM.

More information can be found at https://www.tum.de/nc/en/research/postdocs/research-opportunities-week/