



- 8:00 – 9:00** Light breakfast
- 9:00 – 9:30** Introduction and overview of PCN activities
Leads: Ted Schuur, Christina Schädel
- 9:30 – 10:30** Synthesis updates (5 min. presentations)
- 10:30 – 10:50** Coffee break
- 10:50 – 12.00** Synthesis updates (5 min. presentations)

Date: Sunday, December 9, 2018

Time: 9:00 am – 4:00 pm

Location: Grand Hyatt, 1000 H St NW,
Washington, DC 20001

Room: Independence FGHI

SYNTHESIS UPDATES

Carbon Pools:

- **Gustaf Hugelius:** Carbon stock overview, SOC DraRH, nitrogen stocks in permafrost
- **Matthias Fuchs:** River delta carbon stocks
- **Umakant Mishra:** Towards a global harmonized permafrost SOC stock estimate
- **Jessica Ernakovich:** Thaw-induced changes to the permafrost microbiome

Modeling/Benchmarking:

- **Christina Schädel:** Data-model comparison and next steps
- **Erin Trochim/Christian Andresen:** Surface water distribution, prep for breakout

Coffee Break

Carbon Fluxes:

- **Marguerite Mauritz:** Overview of CO₂ flux workshops and syntheses
- **Sue Natali:** Non-growing seasons CO₂ flux synthesis & CO₂ amplitude synthesis
- **Claire Treat:** Update on Methane flux workshop and non-growing season methane
- **Liam Heffernan:** Land-cover model database for estimating current and future CH₄ emissions
- **Sara Knox/Gavin McNicol/Etienne Fluet-Chouinard:** Global Methane synthesis and its implications for high-latitudes
- **Sarah Sayedi/Ben Abbott :** Expert assessment for subsea permafrost and related emissions

Vegetation/Hydrology:

- **Heather Kropp:** Air-soil temperature decoupling across vegetation types
- **Merritt Turetsky:** Ground ice mapping opportunities
- **Jonathan Wang:** Land cover map for Alaska & Canada and its use for the carbon flux world



- 12:00 – 1:00** **Catered lunch at the Grand Hyatt**
- 1:00 – 1:30** **Introduction of new research opportunities, ideas, projects, networks of interest to the PCN**
Arctic Geospatial Data Center (Sina Muster), Nunataryuk (Gustaf Hugelius), ISCN (Avni Malhotra), IPA – Carbon in Permafrost (Gustaf Hugelius), Permafrost CCI Project (Heidrun Matthes), ISRaD (Alison Hoyt), TundraPEAT (Zicheng Yu)
- 1:30 – 2:20** **Breakout rounds I (50 min)**
- 2:20 – 2:40** **Coffee break**
- 2:40 – 3:30** **Breakout rounds II (50min)**
- 3:30 – 4:00** **Wrap-Up and Outlook**

BREAKOUT TOPICS

Breakout rounds I

- A. **CO₂ flux time series** (leads: Ted Schuur, Eugenie Euskirchen)
- B. **Ground ice mapping opportunities** (lead: Merritt Turetsky)
- C. **Subsea permafrost** (leads: Ben Abbott, Sarah Sayedi)
- D. **Microbes in permafrost I – Syntheses** (lead: Jessica Ernakovich)
- E. **Nitrogen stocks in permafrost:** (leads: Yuanhe Yang, Gustaf Hugelius, Jens Strauss)

Coffee Break

Breakout rounds II

- F. **CO₂ and CH₄ flux upscaling** (leads: Jennifer Watts, Sara Knox)
- G. **Surface water distribution** (leads: Erin Trochim, Christian Andresen)
- H. **Permafrost datasets in the ISRaD radiocarbon database** (lead: Alison Hoyt)
- I. **Permafrost carbon outreach/activism opportunities** in our respective states/countries (leads: Ben Abbott, Rafe Pomerance, Sue Natali)