Post-conference excursion Thursday 18 June 2020 (optional)

Tracing anthropogenic contamination of lakes on the Swiss Plateau
- Environmental history since the last Ice Age; natural and anthropogenic eutrophication
- Anoxia of small lakes and human impact since Neolithic times
- Plant Protection Products (PPP) in small lakes and creeks in an area with intense agriculture, industrial, domestic and recreational use
- Sedimentary record of radionuclides: tracing emissions from atmospheric fallout and an upstream nuclear power plant

Guides: Martin Grosjean and Aurea C.-Hernandez, University of Bern
Stefan Röllin, Swiss Federal Institute for NBC-Protection, Labor Spiez
Matthias Ruff, Cantonal Water and Soil Protection Laboratory, Bern

This excursion is made by bus and two short ca 30-minute walks on good trails. Moossee is famous for its 18,000 years climate and environmental history as recorded in varved sediments. We will see how humans have shaped lake biogeochemistry and anoxia for the past 7000 years, and how the Great Acceleration (20th century) with related contaminants is recorded in the sediment. The Swiss Lakeland (Seeland) has been converted in the 19th Century from a wetland into one of the most intensely used agricultural lands with vegetable growing and intense use of PPPs. The soils are shallow, and small water drainage creeks and large groundwater aquifers are at risk. Lake Biel is located downstream a nuclear power plant. We will see the importance of sedimentary radionuclide records, an archive of continuous monitoring of radionuclide emissions in the past.

The itinerary (preliminary) is shown on the map below.

Meeting Point
Thursday 18 June 2020 at 08.30 h, University of Bern Main Building. Return ca 17.30 h (to Bern)

Costs:
CHF 60, included bus ride, lunch bag and water
Hiking equipment, food and drinks
Bring good shoes, sunglasses, sun protection, and a raincoat (depending on weather). A lunch bag and water will be provided.

Disclaimer
Health insurance and insurance against accidents is fully within the responsibility of the participants. The program may be subject to small changes.

Itinerary (dark red line)