



## **First results from a joint seismic survey and two sediment cores from Lake Imandra, Kola Peninsula, NW Russia**

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The research project “Last and current interglacial environments of Kola Peninsula, as reflected in the sediment record of Lake Imandra” is jointly funded by the Saint Petersburg State University and the German Research Foundation (DFG-SPSU 2016). The overall aim of the project is to investigate the climatic and environmental history of the Kola Peninsula during Late Quaternary times based on sediment records from Lake Imandra. For this purpose, a seismic survey has been conducted in August 2017, followed by sediment coring at two sites (Co1410, N67°42.946', E033°05.107', and Co1411, N67°45.026', E033°09.922') in September 2017.

The seismic data, sediment cores, and complementary modern samples are currently under investigation at the collaborating institutions in Germany and Russia. First results suggest that the 8.65 m long core Co1410 contains a complete postglacial record with good time resolution. The 10.04 m long core Co1411 contains a much thinner postglacial record but obviously penetrates into preglacial sediments.

Core Co 1410 is already analysed for geochemical (XRF scanning, CNS, TOC/TIC data) and geophysical (MSCL logging) properties. An age-depth model for this core is based on radiocarbon and OSL dating, paleomagnetic measurements, identification of cryptotephra, and varve counting (where applicable). Here, we provide an overview about the fieldwork at Lake Imandra and highlight some of the initial interpretations made on the basis of the seismic postprocessing and existing analytical data from the sediment cores.