

Joint seminar of the NPI of the CAS

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The use of cosmogenic nuclides in archaeology and geosciences

During the last three decades the cosmogenic nuclides became established, viable, and robust tool used in Earth Sciences, while during the last decade, the first applications in fields of Archaeology and Paleoanthropology appeared. This talk will provide theoretical and methodological introduction on cosmogenic nuclides, summarize the main geochronology calculation models (exposure and burial dating), and summarize applications in geosciences and archaeology. Later on, an NPI-led multi-disciplinary research project aiming to determine burial age by using in-situ cosmogenic nuclide ^{10}Be and ^{26}Al in Korolevo archaeological site in Transcarpathia (western Ukraine) will be presented. The one-year process of the physical and chemical sample preparation, analysis by accelerator mass spectrometry and burial age calculation was accomplished with promising results. The project outcomes can help to understand timing of arrival of the first humans from Africa to Europe.

The seminar will take place on Thursday, January 19, 2023 at 10:00 a.m. in the NPI meeting room (conference room).