**Joint seminar of the NPI of the CAS**

**20. 6. 2024**

**Zuzana Golec Mírová (DRD): Centralization and decentralization processes of the 14th‒4th century BC in Moravia**

Abstract:

The seminar will deal with the study of the degree of centrality of chiefdom societies in the observed period of the 14th‒4th centuries BC in the territory of present-day Moravia. It presents a clearly defined methodology of data collection to help study the issue. Key sites indicating higher social structures are collected within a catalogue and then evaluated together with other data. The work relies primarily on the study of elite contexts, i.e. graves, hoards, selected settlement structures, places of sacrifice and sanctuaries. The aim of the work is to link data from different contexts and not to create artificial structures based on pre-selected interfaces (only interested in graves, hoards, settlements, selected technologies, etc.). The unifying link is the presence or absence of elites. The work is formally composed of both a catalogue and its evaluation, and subchapters presenting individual case studies. Each of the case studies brings different approaches, combining not only archaeological data, but in collaboration with other scientifical disciplines (e.g. analytical chemistry, anthropology, isotope analysis, statistics, and others), attempting to provide the most comprehensive view of the society of the periods under study. A final synthesis of all the data (including statistical evaluation) and its comparison with surrounding regions and other time periods is then used to discuss the development of socio-economic transformations and centralization and decentralization processes. The part led by Dr. Ivo Světlík is devoted to chronology, which is extremely important for tracking individual social changes in space and time. It deals not only with relative archaeological chronology (stratigraphy, typology), but also with absolute dating using C14 and other isotopic dating. It presents the possibilities of overcoming the so-called Hallstatt plateau. The work also explains the importance of using these methods in the study of societies.

**Kristýna Hošková (DRD): Modern phytolith analysis: development of possible solutions for (paleo-) ecological problems**

Abstract:

Phytoliths are microscopic particles of biogenic opal precipitated in plants. After the decomposition of plant parts, phytoliths are deposited in soil as well as various sediments including calcareous. As such, they can be used as valuable fossils for paleoenvironmental reconstruction where other biological evidence (e.g. pollen) is not preserved. Despite this obvious advantage, phytolith analysis faces problems related to taxonomic resolution of phytoliths or dating of the sediments in which they accumulate. In this presentation, I will address these problems using examples from different sedimentary environments in testing 1) holocene continuity of species-rich meadows from the White Carpathians (Czechia); 2) postglacial dynamics of paleoenvironmental conditions and associated human adaptation to non-aquatic conditions in NE Africa (Sudan).