

ÚSTAV GEOLOGIE A PALEONTOLOGIE přírodovědecké fakulty univerzity karlovy

si vás dovoluje pozvat na Paleontologický seminář (MG422S42A), který se koná ve středu **18. března 2020** od **14:50** ve **Velké paleontologické**

Origin of marine calcifying plankton and the nature of major ecological transitions

Michal Kučera

University of Bremen

The present state of the biosphere is the result of a sequence of major ecological transitions, facilitating successive expansion of life into new habitats and leading to an increasing complexity of ecosystems. Each transition was contingent on the emergence of specific adaptations and it is an exciting field of inquiry to consider how such adaptations emerge. One of such transitions is the successive origin of calcifying plankton, requiring animals to abandon life on a substrate and lift-off into the water column, where their prolific calcification transformed global elemental cycles and planetary climate regulation. This presentation will analyse the sequence of adaptations required for such transition in one group of calcifying zooplankton, the planktonic foraminifera. I will show how a serendipitous discovery of a peculiar lifestyle in one plankton species resulted in an unexpected explanation for the rise of the foraminifera into the plankton and discuss the consequences of this finding for the understanding of the triggers of major ecological transitions at large.



