

## **GEWISSENSCHAFTLICHES KOLLOQUIUM**

Zeit: **Montag, den 19.11.2018 um 17:00 Uhr s.t.**

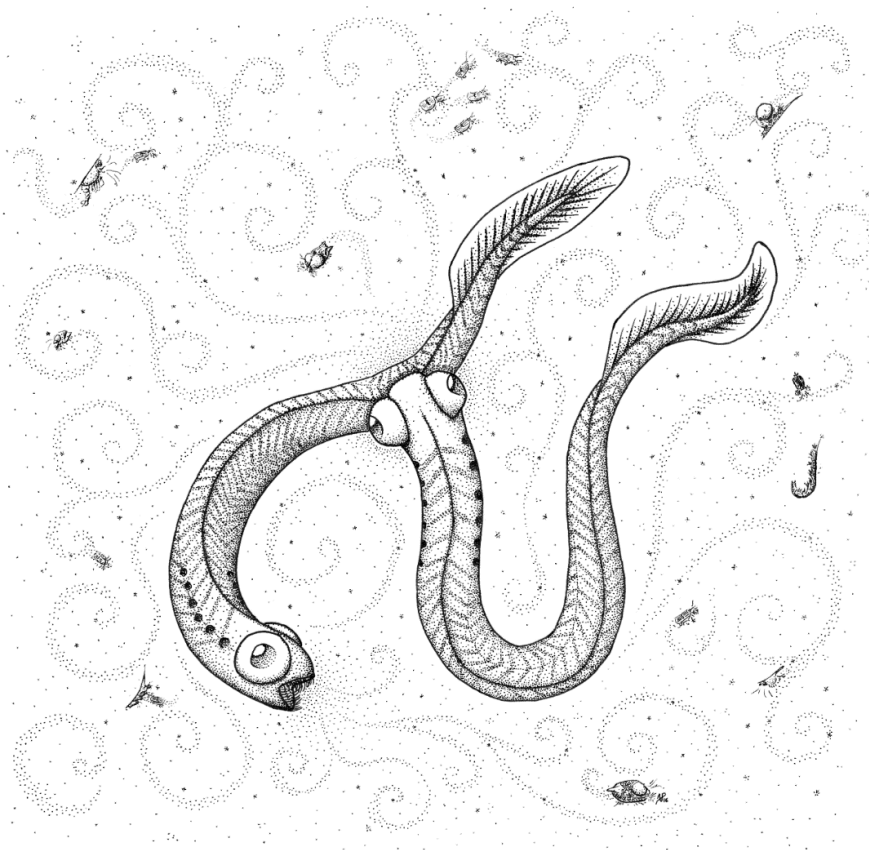
Ort: Hörsaal der Geologie (01.011)

**Titel: Key innovations in the evolution of feeding: a hierarchical approach**

Vortragende: **Dr. Emilia Jarochowska,**  
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**Abstract:**

The emergence of complex trophic networks is among the most important macroevolutionary changes in the Earth's history. It has been dubbed the "Devonian Nekton Revolution" and attributed to the evolution of the nektonic mode of life and of the oral and dermal skeleton. Recent research questioned this view, indicating that diverse actively swimming predators-scavengers were present in the pre-Devonian times and were mostly represented by conodonts. Conodonts



were the first vertebrates to develop biomineralized skeleton and achieved enormous evolutionary success during the Palaeozoic. Their biomineralized elements allow to test hypotheses on genetic and developmental constraints on biomineralization, as well as on its role as a key innovation in macroevolution. In this talk, I will present how the ultrastructure of conodont dental skeleton allowed them to diversify their trophic niches and how this diversification is manifested in the structures of their communities.