

carnivore. The gut content was different between the three localities, where the Loki's Castle specimens had the highest diversity of prey. Differences reflected in the gut content calls for further attention in order to find out whether they can be linked to the water mass as suggested for the microorganism composition, or if other factors as depth and hydrothermal activity are more important.

### **Benthic nematodes assemblages of three new mud volcanoes along the SWIM deep-reaching transform fault in the Horseshoe Abyssal Plain (NE Atlantic)**

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During the RV METEOR M86/5 cruise (as part of the SWIMGLO project PTDC/MAR/100522/2008) three new mud volcanoes were discovered and characterized at ca. 4500m depths: Michael Ivanov, Abzu and Tiamat, located along the already described lithospheric SWIM1 fault in the transition between the accretionary prism and the Horseshoe Abyssal Plain (Gulf of Cadiz). The benthic nematode assemblages present in the sediments collected along the SWIM1 fault, including the three new mud volcanoes, was thoroughly studied, aiming to relate the spatial distribution and structure of the assemblages with the geochemical composition of the seeping fluids from this area in comparison with an area far from the influence of fluid seepage. The sampling design was as follows: four sampling stations located in M. Ivanov MV (including stations located at different distances from the seep site), two in Abzu MV and one in Tiamat Mud. Porto MV and the "Site 2" were sampled as reference stations. Nematodes were the dominant taxonomic group found across all studied stations. The Principal Coordinate analysis (PCO) applied to detect the spatial distribution patterns of nematode assemblages showed a separation of the stations located along the SWIM1 fault and its regional reference (site 2), from the Porto MV located on the accretionary prism, where higher densities of the genera *Sabatieria* and *Linhomoeus* were found. Within the new mud volcanoes, M. Ivanov MV presented an increase in total abundance, as well as a shift in community composition with increasing distance from the seepage site. Furthermore, nematode assemblages density, composition and biomass varied greatly with sediment depth. The abundance, composition and diversity of the nematodes communities found confirm that many deep-sea nematode genera are cosmopolitan, inhabiting a variety of deep-sea habitats, including seepage habitats.

### **Spatial distribution of the Tanaidaceans (Crustacea, Peracarida) from the Mud Volcanoes of the Gulf of Cadiz (NE Atlantic)**

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Tanaidacea is one of the dominant and most diversified taxa in the deep sea and a key element of the trophic system. With no dispersive phase and limited mobility, their distribution