



Einladung

zu der am Montag, 09. Juli 2018, um 17 Uhr
im Geo-Bio-Hörsaal, Zulpicher Straße 49, 50674 Köln

stattfindenden öffentlichen

Antrittsvorlesung

von Herrn

Prof. Dr. Patrick Grunert

(Institut für Geologie und Mineralogie)

über das Thema

Foraminifera: The key to our understanding of ocean-climate dynamics

Foraminifera are single-celled, shell-bearing organisms which inhabit the Earth's oceans since more than 540 million years. Adaptations to a vast range of benthic and planktic habitats and the abundant preservation of their minute shells place them at the center of interdisciplinary micropaleontological research: their long and well-documented evolutionary history forms the backbone of marine biostratigraphy; their fossil assemblages provide prime paleobiological and geochemical archives, and thus the key to paleoceanographic, paleoclimatic and paleoecological research.

In the present lecture, I will discuss the development of foraminifera-based proxy methods which shed new light on dynamics of the ocean-climate system in the past. Based on findings from Expedition 339 of the Integrated Ocean Drilling Program (IODP), particular focus will be given to the pivotal role foraminifera play in the reconstruction of water mass exchange between the North Atlantic and the Mediterranean Sea over the past 5.3 million years.

G. Schwarz
Dekan