



JOINT SFB 754 / FB1 / FB2 SEMINAR ON MONDAY, DEC 11<sup>TH</sup>,  
LECTURE HALL, GEOMAR WESTSHORE, 13:00 h

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## The Tale of Three Upwelling Systems

### **Abstract:**

“Upwelling” is an important process in marine systems to transport essential nutrients from deeper waters to surface, sunlit waters and support the productivity of phytoplankton. As will be described, upwelling happens at various scales ranging from 10s of meters to 100s of kilometers to even ocean basin scales. The Equatorial Atlantic upwelling systems are open ocean basin scale systems while the Vietnamese Bien Dong upwelling is a coastal upwelling system and they both happen seasonally. In contrast, there is a very small scale but chronic upwelling process associated with natural hydrocarbon seeps in the Gulf of Mexico. All of these upwelling features affect the nutrient dynamics and consequent biological response in different ways resulting in changes to the microbial community structure in these regions. The results of our work in these three systems will be presented.