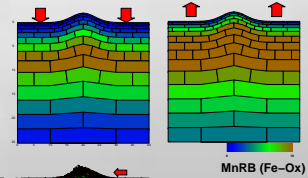


Integrated_Sediment_Modelling

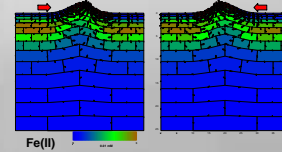
collects **structure** forming processes step by step ...



resuspension & sedimentation during **storm** events

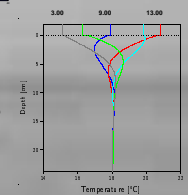


porewater advection driven by **tides**



diffusion & **propagation** of daily and seasonal temperature fluctuations
particle trapping at and below the interface

bioirrigation & bioturbation



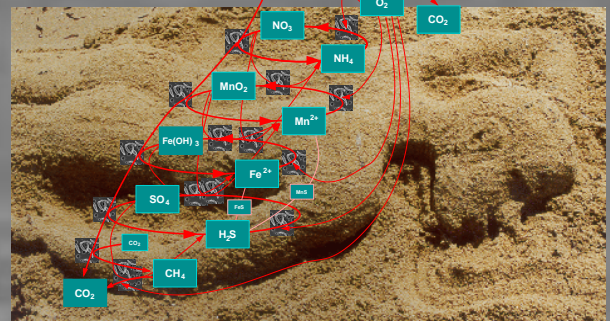
BioGeoChemical circuits with ...

fermentation bottleneck

microbial community changes in space and time

metalsulfide precipitation, N-cycle (not shown)

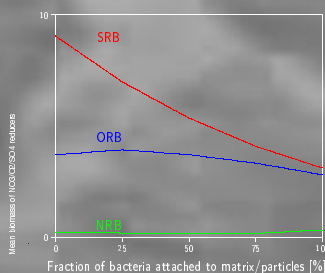
activation state of bacteria



Kai Wirtz, refractory theoretician, modelled by Imke Löffler-Wirtz

Integrated_Sediment_Modelling structures our **hypothesis** collection

Example: Differential benefits of bacterial **adhesion** & motility



understanding the pathway, space and time dependend array
of transportation strategies

