

# DSV 2017 Seminars



UNIVERSITÀ  
DEGLI STUDI DI TRIESTE

DIPARTIMENTO DI  
SCIENZE DELLA VITA

PhD Program in *Environmental Life Sciences*

**Wednesday, 19 December 2017 09:30**

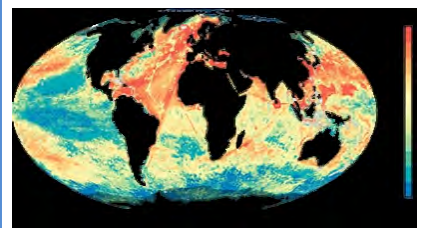
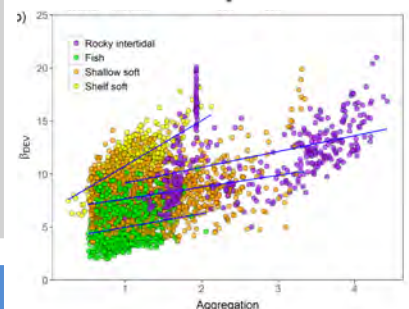
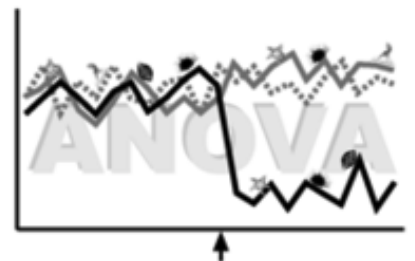
Seminar room, 1st Floor, Q Building

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*Host: Antonio Terlizzi*



## Comfortably numb: do we still need ecological experiments in the era of big data and macroecology?

Ecology is becoming engaged in addressing large-scale problems, an endeavor that is made possible by the increasing availability of large datasets that allow ecologists to test hypotheses at unprecedented scales, also promoting the integration of disciplines that typically focus on different levels of biological organization. A main challenge in the interpretation of large datasets is that they are mostly observational, so they may have limited ability to uncover causal relations among variables. Experiments are better suited at attributing causation, but they are often limited in scope and the prevailing view is that they have little to offer in the age of macroecology and 'big-data. I will address these topics using examples from my own research on the ecology of rocky shores and propose hybrid datasets, resulting from the integration of observational with experimental data, as a novel approach to leverage the scope and ability to attribute causality in ecological studies.