



**Dr. Véronique C. Garçon**

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Wednesday, 19th February 2014, 10:00 a.m.

**GEOMAR Lecture Hall West (R.B54) | Düsternbrooker Weg 20, 24105 Kiel**

## Space and species: Ocean dynamics and navigational behavior – A multi-scale and multi-sensors approach

**Mesoscale and sub-mesoscale structures [fronts, eddies, filaments] in surface ocean flow have a crucial influence on structure and functioning of the marine ecosystems. Their dynamics partly control the foraging behavior and the displacement of marine top predators [tuna, birds, turtles, and cetaceans].**

Dr. Véronique Garçon will examine how top marine predators such as sea turtles and sea birds interact with this turbulent environment either undergoing the oceanic currents or tracking Lagrangian Coherent Structures. Remote sensing via altimetry and scatterometry allows to produce mesoscale information of the ocean dynamics, the GEKCO product. She will show how the use of super resolution remotely sensed data [SST, ocean color] combined with this GEKCO product, and a novel multi-resolution analysis using a multiplicative cascade provides access to the oceanic sub-mesoscale information, required to fully interpret marine species navigational behavior.



**Organizer: Women's Executive Board [WEB]**

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