



From hypoxia to hyperoxia: how diel oxygen fluctuations shape the metabolism of coral reef fish

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On coral reefs extreme oxygen fluctuations occur daily, with waters becoming hyperoxic during the day and progressively hypoxic at night. Oxygen is also heterogenous across the spatial scale on a reef. Different species, and populations within a species, can therefore experience varying oxygen levels depending on their behaviour and distribution. In this seminar, I will present data from fieldwork and lab experiments performed in Moorea, French Polynesia, where we first mapped the spatial and temporal oxygen profiles on the reef. Then, using two diurnal reef-dwelling damselfish and one nocturnal cardinalfish, we measured metabolic performance across oxygen levels. By combining these with behavioral data our aim is to predict the available oxygen budget these species have across their daily cycle.



**Friday, January 26th from 12.00 to 12.45 in the
Zoophysiology Seminar Room (1131-127)**