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Woods Hole Oceanographic Institution  
**Biology Department Seminar**



Thursday, July 13, 2023 – 12:00 Noon

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## Unravelling the Acoustic Life of Lobsters

**Youenn Jezequel**

Postdoctoral Investigator at WHOI

The ecological role(s) of the sounds produced by crustaceans is poorly known compared to marine mammals and fish. Understanding the importance of the sounds emitted by a species is critical to better apprehend the impacts of anthropogenic noise on their behaviors. To fill this gap, we studied two crustacean species of high commercial and cultural interest in Europe and the US: the European (*Homarus gammarus*) and the American (*Homarus americanus*) lobsters. Taking into account the physical effects of tanks on sounds, we highlighted the high production of buzzing sounds between male European lobsters during agonistic encounters to establish dominance status. Further, we demonstrated using a neurophysiological approach that lobsters are able to detect sounds in the same frequency band than the buzzing sounds they produce, which strengthens the hypothesis of an acoustic communication in this taxon. This work raises new perspectives in marine ecology to study the impacts of anthropogenic noise on crustacean populations.

**HYBRID! In person:** Redfield Auditorium **Zoom:** <https://whoi-edu.zoom.us/j/92845976113>

Meeting ID: 928 4597 6113 **By phone:** Find your local number: <https://whoi-edu.zoom.us/u/aAzNUXqOG>