



Maritime DTU
Center for Maritime Activities

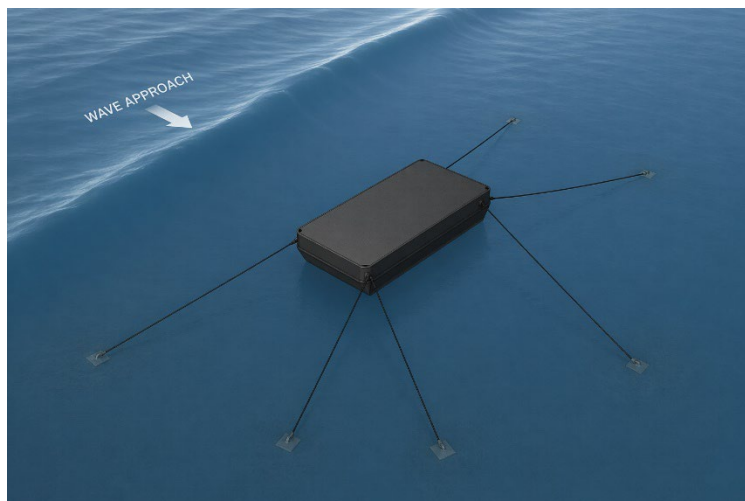
Mooring Dynamics Tools for Aquaculture Feeding Barges

Type of project: MSc

Project description:

As aquaculture expands into more exposed environments, feeding barges require reliable mooring systems to ensure operational safety and efficiency. These relatively compliant structures are sensitive to environmental loading, and their response depends strongly on mooring configuration and modelling approach.

This project investigates the performance and reliability of commonly used mooring analysis tools when applied to feeding barge systems. By comparing quasi-static and fully dynamic formulations under representative wave and current conditions, the study will assess differences in predicted line tensions, barge motions, and nonlinear effects such as slack-taut behaviour. The outcome will be a critical evaluation of tool capabilities, identification of key uncertainties, and practical recommendations for selecting appropriate analysis methods in aquaculture applications.



Contact persons

Harry B. Bingham
DTU Construct
hbbi@dtu.dk

Bárdur Joensen
University of the Faroe
Islands
bardurj@setur.fo