Maritime DTU
Center for Maritime Activities

A parametric study of the energy extraction potential when harvesting wave energy for powering of ships

Type of project: MSc

Project description:

Ocean waves contain energy. The harvesting of wave energy is well-known, but relatively little has been done to investigate how wave energy can be used for powering of ships; either in direct form by wave-assisted propulsion or by energy extraction from the wave-induced motions. This study should explore the energy extraction potential when harvesting wave energy for powering of ships. Specifically, parameter studies should investigate how much energy (or power) is available assuming given ship sizes, ship types, and sea states. The study works with simulated data and will include spectral calculations and analysis as well as computations of the added resistance in waves.

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