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Reliable online predictions on lift marine operations, considering installed object failure modes and inherent uncertainties

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Research topics

- Online evaluation of critical loads present in a given marine operation condition, considering installing object and vessel dynamical responses
- Short-term prediction of failure modes due to hydrodynamic interactions
- Usage of an open simulation platform to evaluate the uncertainties inherent to the object installation operation

Industrial goals

- Determination of critical temporal windows to execute lift marine operations

Scientific questions

- How to make on-board decisions of “go” and “no-go” installation windows and their uncertainties from vessel and installing object data responses, considering short-term predictions of the sea behavior in advance

Innovations

- Methods to execute short-term predictions and uncertainties of lifting marine operations using online simulations of vessel and installing object data in an open simulation platform

Cooperating companies

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