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The irradiated noise underwater by the ships: a state of the art

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The attention on a global scale to the preservation of the ecosystems and to the reduction of emissions connected to anthropogenic activities falls mainly on industrial activities and on the transport sector. The role of the maritime sector is crucial in this theme since it impacts both on the balance of both marine and terrestrial ecosystems. Reduction of vessel emissions into the marine environment, including energy like the sound radiated underwater, has in recent years received growing attention. Underwater noise from shipping is generally considered as a major contributor to overall sea noise levels. Surface vessels radiate underwater noise mainly due to propeller cavitation; machinery on board and water flow around the ship hull. High sound levels are a potential threat for marine fauna as they can mask acoustic signals used to communicate, navigate and hunt, or even induce temporary or permanent damage to sensory organs. In this paper, we want to study the last developments in this field in which a big job will be made to clarify all the aspects.

Primary author: Prof. COPPOLA, Tommaso (University of Naples)

Co-authors: Mr DE LORENZO, Francesco (Fincantieri); Mrs MOCERINO, Luigia (Università degli Studi di Napoli, Federico II)

Presenter: Mr DE LORENZO, Francesco (Fincantieri)

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