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Bubbly wake of surface vessels FRANÇOIS CAILLÉ, IRPHE, JACQUES MAGNAUDET, IMFT, CHRISTOPHE CLANET, LadHyX — We study the length of the bubbly wake of surface vessels. This wake is important for the boat security since it can extend to several ship length and thus increases the detectability of the ship by torpedoes. The image analysis of the wake of real scale ships reveals the sensitivity of the length to propellers. We have thus conducted a systematic study in the laboratory of the interaction bubble/propeller, trying to address several questions:

- what is the role of cavitation?
- is the propeller able to attract the bubbles present along the ship at the sea surface?
- if attracted, can these bubble be broken by the propeller?

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