UNIVERSITÀ DELLA CALABRIA
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Resonance of a floating object in a wave field

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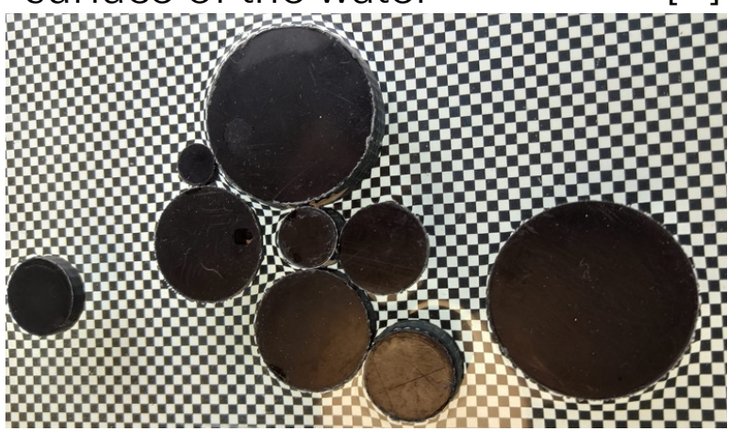
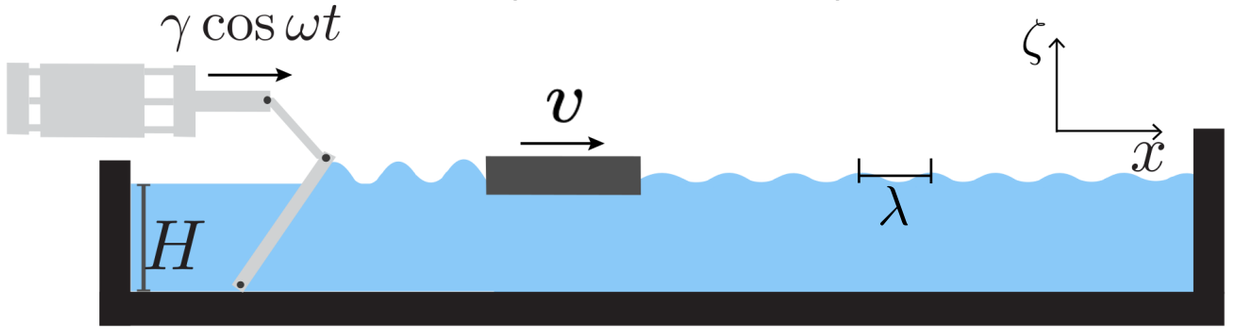
Marginal ice zone [1]

Floating cylinders on the surface of the water [2]



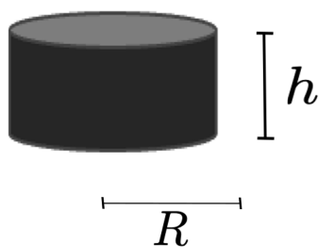
Experimental setup



g gravity | ρ density | σ surface tension

schematic side view

Floating plastic cylinder

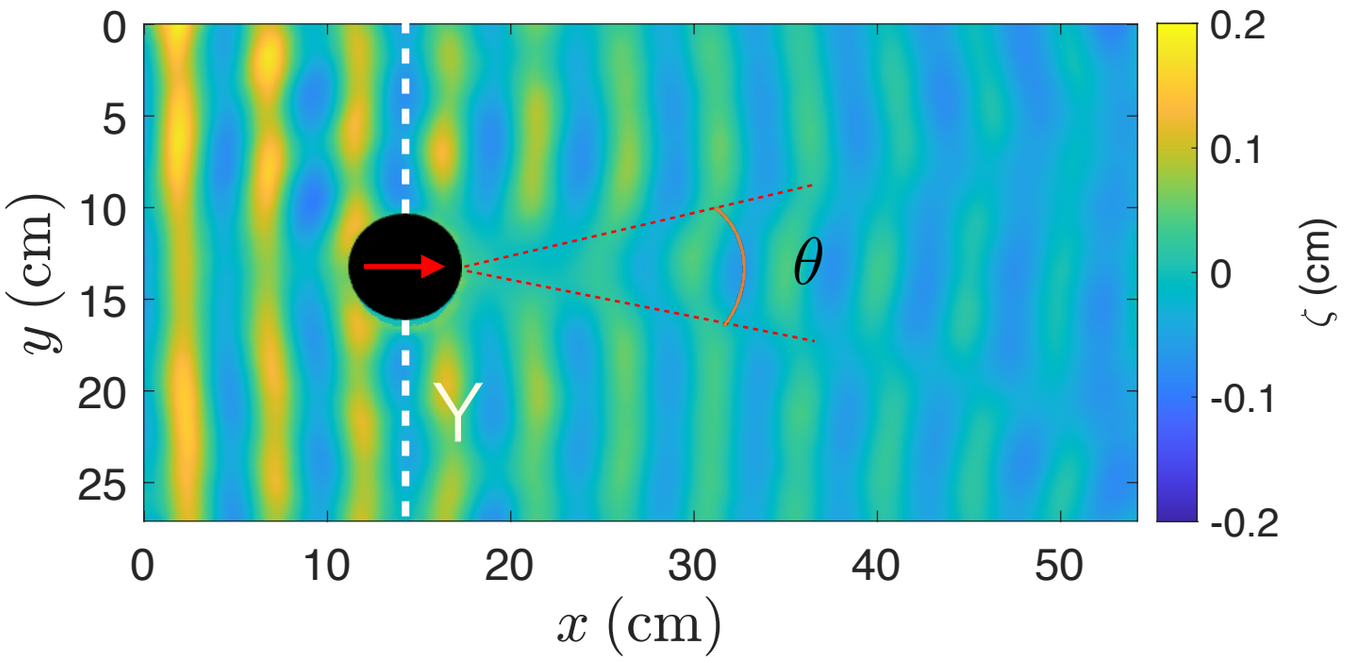


[1,2]Turbots research group / PMMH

Characterisation of a floating object in a wave field

Wave field generated by the floating object, when it interacts with incoming waves.

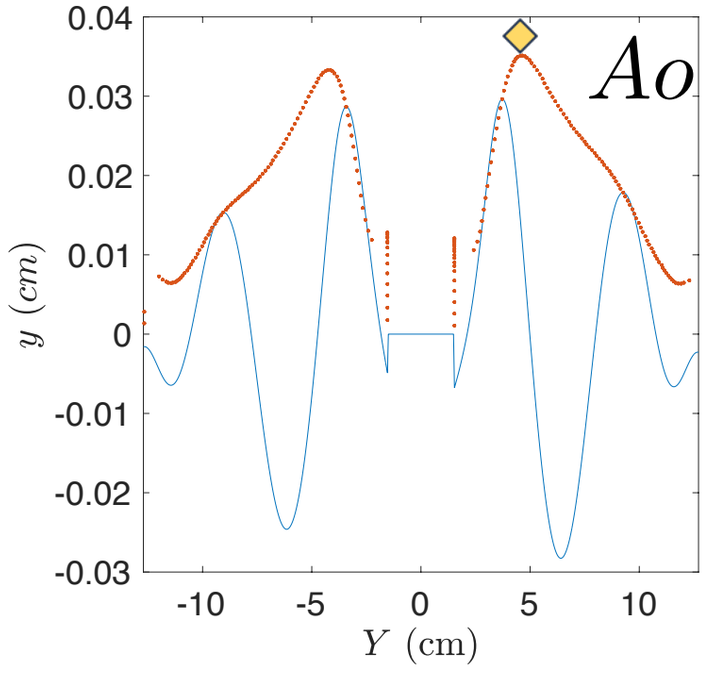
Surface reconstruction (from technique [3,4])



Profile analysis of the wave field

Profile Y

Maximum amplitude filtered



Peak detection of the wave field

[3] Moisy, F., Rabaud, M. & Salsac, K. Exp. Fluids. 46, 1021-1036 (2009).

[4] Wildeman, S. Exp. Fluids. 59, 97 (2018).