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Experimental analysis of bubble jets collision

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Collisions of bubble jets have been experimentally studied in normal gravity conditions. Jets are introduced into a cavity full of liquid by means of a microbubble injector [1]. The experimental set-up, designed for a future use in a microgravity environment, allows the control of the impact angle between jets [2], bubble size and velocity. Individual bubble properties and the whole jet structure are analyzed from the images recorded.

We present results on the role played by the impact angle and the distance between injectors on the structure of the final jet. A systematic study for different gas and liquid flow rates has been carried out in order to compare the obtained results in normal gravity with those to be obtained in a future campaign at INTA drop tower.

References

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