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A focused liquid jet using a pressure impulse AKIHITO KIYAMA, YUTO NOGUCHI, YOSHIYUKI TAGAWA, Tokyo University of Agriculture and Technology — We examine a behavior of a focused liquid jet using a pressure impulse inside a test tube filled with a wetting liquid. It is found that the jet velocity depends on the initial height of the test tube while it is independent of the diameter of the tube. We rationalize these results by employing a pressure impulse approach and considering a flow focusing due to the concave shape of the meniscus. In addition, we generate the focused liquid jet consisting of two different liquids. The jet velocity varies non-monotonically with the ratio of the two liquids.

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