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Fast particle ejection by a growing laser-induced bubble.¹ ZHIGANG ZUO, SHENGJI WU, HOWARD STONE, SHUHONG LIU, None — We document experimentally four different interactions of a laser-induced bubble and a free-settling particle, with different combinations of the geometric and physical parameters of the system. In particular, we also discover the high-speed ejection of the particle, and a cavity behind the particle, in cases when initially the particle is in very close proximity to the bubble. These observations offer new insights into the causal mechanism for the enhanced cavitation erosion in silt-laden water.

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Zhigang Zuo
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