Abstract Submitted
for the DFD17 Meeting of
The American Physical Society

A novel device for hydrodynamic separation of inertial particles[1]

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Current methods of particle separation, ranging from filtration devices to cyclones are inadequate in terms of maintenance or precision, respectively. A recent analytical work has shown that inertial particles placed in a flow that is temporally and spatially varying, exhibit extremely different behavior for a slight change in their size. In such flows, particles of a certain size can form cluster whereas particles that are larger in diameter by as low as 1

[1]This work was supported by the Stanford Mechanical Engineering Department and the United States Department of Energy at Stanford University.

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Date submitted: 15 Aug 2017 Electronic form version 1.4