Abstract Submitted
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Collision of a flexible filament with a point vortex[1] SILAS ALBEN,
University of Michigan — A flexible filament is attracted to a point vortex when
they move together as a coupled system. The point vortex collides with the filament
at a finite time, with the separation distance tending to zero as a square root of time.
The filament curvature, velocity, and pressure loading diverge near the collision. We
explain the power laws describing these behaviors.

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