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Possible self focusing mechanism of an inertial wave WALEED
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COLLABORATION — We study inertial wave-wave interaction into an incompress-
ible inviscid rotating fluid, by analyzing a Ginzburg-Landau equation with complex
coefficients (asymptotically derived from the relevant Navier-Stokes equation). We
compute the wave coupling terms at different orders in wave amplitude, relying on
an approximated associated Beltrami property. At third order it is shown that wave
self-coupling can lead to wave self-focusing. A short comparison is made with recent
experiments.

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