

Abstract Submitted
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BGK-type waves in slowly evolving plasmas RYAN LINDBERG,
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LBNL Center for Beam Physics — We introduce a specific class of BGK-type waves
that arise naturally in slowly-evolving Vlasov plasmas, characterized by a distri-
bution function in terms of the canonical particle action. Using some naturally
motivated assumptions and the constraints of self-consistency, we determine the
wave's nonlinear properties and compare these to driven Vlasov systems. We then
show how this may lead to reduced models of driven plasmas relevant, for example,
to simulated Raman scatter.

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