Abstract Submitted for the DPP17 Meeting of The American Physical Society

Hybrid drift-kinetic pressure coupling scheme from a variational principle. ALEXANDER CLOSE, CESARE TRONCI, University of Surrey — A hybrid-kinetic pressure coupling scheme (PCS) model is presented in the low-gyrofrequency approximation. This fully energy-conserving model is derived from variations of a Lagrangian over a semidirect product manifold, and produces important terms in the Vlasov equation that correct models previously appearing in the literature.

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Date submitted: 14 Jul 2017 Electronic form version 1.4