Exact momentum conservation laws for truncated gyrokinetic Vlasov-Poisson equations\(^1\) NATALIA TRONKO, CFSA Warwick (UK), ALAIN BRIZARD, Saint Michaels College — The exact momentum conservation laws are derived by Noether method for the truncated gyrokinetic Vlasov-Poisson equations based on a variational formulation constructed in [1]. We thus obtain results similar to our previous work [2], which may find applications in the numerical investigations of intrinsic rotation of axisymmetric tokamak plasmas by delta-f gyrokinetic simulation methods.


\(^1\)Work supported by U.S. DoE (AJB).