1172-78-279   **J W Banks**, **T Buckmaster** and **A O Korotkevich*** (`alexkor@math.unm.edu`), Department of Mathematics and Statistics, MSC01 1115, 1 University of New Mexico, Albuquerque, NM 87131-0001, and **G Kovacic** and **J Shatah**. *Direct numerical validation of 6-wave 1D kinetic equation (and its applicability to quintic NLSE).*

We consider kinetic equation for quintic-NLSE, corresponding to 6-wave nonlinear waves interaction. Kinetic equation for the periodic boundary conditions was derived. We propose conditions on values of equation parameters which guarantee reasonably accurate description of the wave field by wave kinetic equation. Direct numerical simulations in both dynamical equation and wave kinetic equation frameworks demonstrate acceptable correspondence between these significantly different models when proposed conditions for parameters are satisfied. (Received August 30, 2021)