

1011-35-365

**Grozdena Todorova\*** (todorova@math.utk.edu), Department of Mathematics, University of Tennessee, Knoxville, TN 37996. *Instability for the Klein-Gordon-Zakharov system.*

The Klein-Gordon-Zakharov system describes interaction between Langmuir waves and ion waves in plasma. We present strong instability results for the standing waves of the Klein-Gordon-Zakharov system. The strong instability result covers the range of all frequencies. For small frequencies we prove blow-up instability of standing waves for the Klein-Gordon-Zakharov system. (Received August 30, 2005)