1125-35-1331 **Vera Mikyoung Hur**, **Mathew A. Johnson** and **Ashish Kumar Pandey*** (akpande2@illinois.edu). *Transverse instability in Kadomtsev-Petviashvili (KP), rotation-modified KP and full-dispersion KP equations.*

The instability caused by perturbing a 1D-wave by a perturbation in transverse direction is called transverse instability. We study this phenomenon for KdV periodic waves as a 1D-wave of KP equation. For KP-I equation, we provide a complete picture of transverse instability with respect to periodic as well as non-periodic perturbations in transverse direction. We extend our analysis to rotation-modified KP and full-dispersion KP models and obtain some new transverse instabilities in these models. (Received September 16, 2016)