Darboux transformations and discrete mKdV equations

Joseph Cho (TU Wien)

Wed 2/12/2020, 15:00, online

It is well-known that the integrability of certain motions of planar curves give rise to the modified Korteweg-de Vries equation. In this talk, we view those motions as Darboux and infinitesimal Darboux transformations to introduce an efficient route to obtaining the semi-discrete and discrete modified Korteweg-de Vries equation. This talk is based on the joint work with Wayne Rossman and Tomoya Seno at Kobe University.