Speaker: Katelyn Grayshan

Title: Peakon solutions and continuity properties of the Novikov equation

Abstract. We shall consider both the periodic and non-periodic Cauchy problem for the Novikov equation and discuss continuity results for the data-to-solution map in Sobolev spaces. In particular, we show that the data-to-solution map is not (globally) uniformly continuous in Sobolev spaces with exponent less than 3/2. To accomplish this, we construct sequences of peakon solutions whose distance initially goes to zero but later becomes large.