1015-35-65 Alex A Himonas* (himonas.1@nd.edu), Department of Mathematics, University of Notre Dame, Notre Dame, IN 46556-5683. On well-posedness and regularity of nonlinear evolution equations. Preliminary report.

We shall discuss well-posedness and regularity results about the KdV equation, the Fokas-Fuchssteiner-Camassa-Holm equation and their modifications. We shall consider both cases of rough and analytic data. (Received January 22, 2006)