1086-35-2367 **Melissa Davidson*** (mdavids4@nd.edu), 255 Hurley, Department of Mathematics, Notre Dame, IN 46556. *Continuity Properties of the Solution Map for the Generalized Reduced Ostrovsky Equation.*

It is shown that the data-to-solution map for the generalized reduced Ostrovsky (gRO) equation is not uniformly continuous on bounded sets in Sobolev spaces on the circle with exponent $s > 3/2$. Considering that for this range of exponents the gRO equation is well-posed with continuous dependence on initial data, this result makes the continuity of the solution map an optimal property. However, if a weaker H^r-topology is used then it is shown that the solution map becomes Hölder continuous in H^s. (Received September 25, 2012)