1172-42-350 A. Aldroubi, L. Huang, K. Kornelson* (kkornelson@ou.edu) and I. Krishtal. A predictive algorithm in dynamical sampling for IVPs with burst-like forcing terms.

We consider the problem of recovery of a burst-like forcing term in an initial value problem (IVP) in the framework of dynamical sampling. We introduce an idea of using a specific structure of samplers that allow one to predict the solution of the IVP over a time interval without a burst. This leads to an algorithm that approximates the burst-like forcing term even in the presence of a measurement acquisition error and a background source. (Received August 31, 2021)