

1107-42-309

**Akram Aldroubi** and **Keri Kornelson\*** (kkornelson@ou.edu). *Dynamical sampling with a constant forcing term*. Preliminary report.

We use the dynamical sampling structure, in which a signal being sampled is evolving over time via a known bounded operator  $A$ . Given this information, it may be that samples taken at fewer points, but repeated at incremental times, can be used to stably reconstruct the initial signal. The reconstruction depends on what is known about the evolution operator  $A$ . In this work, we consider the presence of an additive forcing agent influencing the system. We give conditions under which reconstruction can still occur with stability. (Received January 18, 2015)