1145-35-1899 Ramesh Karki\* (rkarki@iue.edu), 2325 Chester Blvd, Richmond, IN 47374. A finite sampling method for approximating initial data in some linear evolution equations. Preliminary report.

We study an inverse problem of recovering initial datum in a one-dimensional linear evolution equation with the Dirichlet boundary conditions when finitely many values (samples) of the solution at a suitably fixed space location and suitably chosen fixed many later time instances are known. (Received September 24, 2018)