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Cheng Cheng, Yingchun Jiang and Qiyu Sun^{*}, Department of Mathematics, University of Central Florida, Orlando, FL 32816. *Spatially Distributed System for Sampling and Reconstruction* of Signals on a Graph. Preliminary report.

A spatially distributed sampling and reconstruction system consists of huge amounts of small sensing devices with limited computing and telecommunications capabilities. In this talk, we will discuss robustness of such a system and develop a distributed algorithm for fast signal reconstruction. (Received January 18, 2015)