1128-68-112 Mahantesh Halappanavar* (hala@pnnl.gov), Ananth Kalyanaraman, Hao Lu, Craig Bakker and Arun Sathanur. Mining for Communities in Large-Scale Graphs.

Graph clustering (or community detection) is a fundamental graph kernel with numerous applications in science and data analysis. The goal of clustering is to partition the vertices into subsets that are tightly connected within but sparsely with the rest of the graph. The ubiquity of large-scale data drives the need for scalable clustering on graphs with diverse characteristics. Parallel clustering algorithms are challenging due to the inherently serial nature of current algorithms. In this talk I will present challenges and recent algorithmic advances for efficient parallel community detection. (Received February 19, 2017)