1126-05-144 **Freddie Zhao*** (freddiezhao1@gmail.com), 4777 Northfield Parkway, Troy, MI 48098, and **Eddie Cheng**, **Spencer Liu** and **Chittesh Thavamani**. *Strong matching preclusioncProblem of the folded Petersen cube.* Preliminary report.

The strong matching preclusion number of a graph is the minimum number of vertices and/or edges whose deletion results in a graph that has neither perfect matchings nor almost perfect matchings. For many interconnection networks, the optimal sets are precisely those induced by a single vertex. This is an extension of the matching preclusion problem that was introduced by Park and Ihm. In this talk, we discuss the strong matching preclusion number of the folded Petersen cube $FPQ(n, k)$ and the classification of optimal strong matching preclusion sets of these graphs. (Received January 10, 2017)