Dimensionality reduction in the analysis of human genetics data

Dimensionality reduction algorithms (either deterministic or randomized) have been widely used for data analysis in numerous application domains, including the study of human genetics. For instance, linear dimensionality reduction techniques (such as Principal Components Analysis) have been extensively applied in population genetics. In this talk we will discuss such applications and their implications for human genetics, as well as the potential of applying non-linear or supervised dimensionality reduction techniques in this area