A Network Theoretic Approach to Hyperspectral Image Classification.

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Hyperspectral imaging has a variety of applications, including environmental mapping, geological research, wetlands mapping, plant and mineral identification, crop analysis, anomaly detection, and target detection. We present a new automated method for the classfication of a hyperspectral image. Our method uses ideas from the mathematics of social networks, specifically Newman's method of optimal modularity for community detection.