

GENUS DISTRIBUTIONS OF CUBIC GRAPHS

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(This talk is based on joint work with MacKenzie Carr.)

The ensemble of all 2-cell embeddings of a cubic graph G can be described by using the zero-homologous subsets of the dual graph of a fixed reference embedding of G . By using these subsets (called unstable duals), the speaker will discuss log-concavity of genus distributions and provide counterexamples to the 1989 conjecture of Gross, Robbins, and Tucker.