

Manifolds associated with Z_2 colored graphs

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We will describe a canonical way to expand certain kind of $(Z_2)^{n+1}$ -colored regular graphs into closed n -manifolds (by adding cells determined by the edge-colorings inductively), and shows that every closed combinatorial n -manifold can be obtained in this way. Simple equivalent conditions for a colored graph to admit such expansion is also found in the case when $n < 4$.

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