

On 2-skeleta of hypercubes

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Abstract

It is shown that the 2-skeleton of the odd- d -dimensional hypercube can be decomposed into s_d spheres and τ_d tori, where $s_d = (d-1)2^{d-4}$ and τ_d is asymptotically in the range $(64/9)2^{d-7}$ to $(d-1)(d-3)2^{d-7}$.

Keywords: Cube decomposition, even-degree 2-complex, generalized book.

Math. Subj. Class.: 57M20, 57M15, 05C45



O 2-skeletih hiperkock

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Povzetek

Dokažemo, da je 2-skelet liho- d -dimenzionalne hiperkocke razgradljiv na s_d sfer in τ_d torusov, kjer je $s_d = (d-1)2^{d-4}$, τ_d pa je asimptotsko med $(64/9)2^{d-7}$ in $(d-1)(d-3)2^{d-7}$.

Ključne besede: Razgraditev kocke, 2-kompleks sode stopnje, posplošena knjiga.

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