

Binary Hamming Graphs in Archimedean Tilings

Fuji Zhang

Xiamen University

fjzhang@xmu.edu.cn

In this paper, we find all binary Hamming tilings (i.e. the tilings corresponding to binary Hamming graphs) in Archimedean tilings and show the only four such tilings are $(4; 4; 4; 4)$, $(6; 6; 6)$, $(4; 8; 8)$ and $(4; 6; 12)$. Then we compute the Wiener number of some plane connected subgraphs of binary Hamming tilings and consider their asymptotic behavior