

## Omega polynomial in twisted ((4,8)3)R tori

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### Abstract

Quasi orthogonal cuts qoc with respect to a given edge in a graph  $G=G(V,E)$  are defined as the smallest subset of edges closed under taking opposite edges on faces. Omega polynomial  $\omega(G, x)$  counts the qoc strips of all extent in  $G$ . The first and second derivatives, in  $x=1$ , of this polynomial enables the calculation of the recently proposed CI index. Analytical close formulas for calculating  $\omega(G,x)$  in twisted ((4,8)3)R tori are derived.

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