A Schlegel \((d-1)\)-diagram is a polytopal subdivision of a \((d-1)\)-polytope, obtained by projecting the boundary complex of a \(d\)-polytope \(P\) onto one of its facets. It is used to investigate \(P\) by visualization in a lower dimension.

The toric \(h\)-vector \(h = (h_0, h_1, \ldots, h_d)\) is recursively defined for any \((d-1)\)-dimensional polytopal complex. We prove that the toric \(h\)-vector of a Schlegel \((d-1)\)-diagram satisfies

\[
h_d \leq h_0 \leq h_{d-1} \leq h_1 \leq h_{d-2} \leq h_2 \leq \cdots \leq h_{\lfloor d/2 \rfloor + 1} \leq h_{\lfloor d/2 \rfloor} \leq h_{\lfloor d/2 \rfloor - 1} \leq h_{\lfloor d/2 \rfloor}
\]

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