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Counting C-polyhedra facets

A translative (resp. homothetic) C-polyhedron $P \subset \mathbb{E}^d$ is an intersection of translates (resp. homothets) $C_1, C_2, \dots C_n$ of a convex body $C \subset \mathbb{E}^d$; the intersection is reduced and has an interior. If $F' \subset P \cap \mathrm{bd} C_i$ is connected, singularity-free and isn't a part of a larger connected singularity-free subset of $P \cap \mathrm{bd} C_i$, then $F = \mathrm{cl} F'$ is a facet of P contributed by C_i. I will talk about our joint work with Cameron Strachan, estimating number of facets for C-polygons in $\mathbb{E}^2$. I will also show that when $C \subset \mathbb{E}^d$ is a Euclidean ball, every translate C_i contributes exactly one facet to a translative C-polyhedron.