Erdos-Szekeres type theorems for planar convex sets.

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A family $\mathcal{F}$ of sets is in convex position if none of its members is contained in the convex hull of the union of the others. The members of $\mathcal{F}$ are ovals (compact convex sets) in the plane that have a certain property. An Erdos-Szekeres type theorem concerns the existence, for any integer n≥3, of a smallest positive integer $N(n)$ such that if $|\mathcal{F}|\geq N(n)$ then there are n ovals of $\mathcal{F}$ in convex position.

The history of these theorems is rife with applications of Ramsey's theorem to increasingly general families of $\mathcal{F}$. We survey the history and introduce some recent results based upon work with Gabor Fejes Toth .