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Essential dimension of pseudo-reflection groups

An $n \times n$ complex matrix is called pseudo-reflection if its eigenvalues are $1, \ldots, 1, t$, where $t \neq 1$ is a root of unity. Finite groups generated by pseudo-reflections were classified by Shephard and Todd in the 1950s. This classification is one of the high points of invariant theory of finite groups. In this talk, based on joint work with A. Duncan, I will define the essential p-dimension of a finite group and present a simple formula for the essential p-dimension of a pseudo-reflection group.