## Dimension of the variety of flags fixed by a nilpotent endomorphism

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The problem of computing the dimension of the variety of flags fixed by a nilpotent endomorphism is reduced to a problem of polynomial complexity by means of a combinatorial optimization approach. We also recover a criterion to decide when this dimension attains a well known upper bound. This last result is related to the Gale–Ryser Theorem on the existence of (0,1)–matrices.