**Marko Huhtanen**: *Aspects of nonnormality for iterative methods*; Helsinki University of Technology Institute of Mathematics Research Reports A453 (2002).

**Abstract:** *Recently new optimal Krylov subspace methods have been discovered for normal matrices. In light of this, novel ways to quantify nonnormality are considered in connection with various families of matrices. We use as a criterion how, for a given matrix, these iterative methods introduced can be employed via, e.g., inexpensive matrix factorizations. The unitary orbit of the set of binormal matrices provides a natural extension of normal matrices. Its elements yield polynomially normal matrices of moderate degree. In this context several matrix nearness problems arise.*

**AMS subject classifications:** 65F10, 65F15

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