

EQUIANGULAR TIGHT FRAMES

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This talk is based on the review paper [1].

Four equivalent definitions of a tight frame are discussed. A construction of a known Mercedes-Benz frame is generalized for a case of an n -dimensional space. Notions of Mercedes-Benz systems and Mercedes-Benz matrix are introduced. A question of existence of equiangular tight frames is studied.

Extremal properties of tight frames, Mercedes-Benz systems and equiangular tight frames are pointed out.

References

1. V. N. Malozemov, A. B. Pevnyi, “Equiangular tight frames”, J. Math. Sciences, vol. 157, no. 6, pp. 789–815, 2009.