Duals of Affine Grassmann Codes and Their Relatives - DTU Orbit (15/12/2018)

**Duals of Affine Grassmann Codes and Their Relatives**

Affine Grassmann codes are a variant of generalized Reed-Muller codes and are closely related to Grassmann codes. These codes were introduced in a recent work by Beelen Here, we consider, more generally, affine Grassmann codes of a given level. We explicitly determine the dual of an affine Grassmann code of any level and compute its minimum distance. Further, we ameliorate the results by Beelen concerning the automorphism group of affine Grassmann codes. Finally, we prove that affine Grassmann codes and their duals have the property that they are linear codes generated by their minimum-weight codewords. This provides a clean analogue of a corresponding result for generalized Reed-Muller codes.

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