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Subspace arrangements yearning for freedom

Unlike the situation for hyperplane arrangements, the module of derivations on a subspace arrangement is never a free module. We introduce a new concept, *derivation radical*, and show that a hyperplane arrangement is free if and only if it is derivation radical. We then explore which equidimensional subspace arrangements are derivation radical.

This is a preliminary report on joint work with Max Wakefield (USNA).