

1125-00-3168 **Ian Smythe*** (ismythe@math.cornell.edu), Cornell University. *Madness in vector spaces.*

A collection of finite dimensional subspaces of a vector space is maximal almost disjoint, or mad, if distinct elements have finite-dimensional intersection and the collection is maximal with respect to this property. We outline and consider the basic questions regarding these families, such as their cardinality under set theoretic assumptions, the existence of \mathbb{P} -indestructible mad families for notions of forcing \mathbb{P} , and the existence of denable, i.e., analytic, such families. This last concern motivates connections with the author's local Ramsey theory for block sequences in vector spaces. (Received October 03, 2016)