

1135-03-1279

**Ian B. Smythe\*** ([i.smythe@rutgers.edu](mailto:i.smythe@rutgers.edu)), Department of Mathematics, Rutgers, The State University of New Jersey, Piscataway, NJ 08854. *Madness in vector spaces, round 2.*

A collection of infinite-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 consider questions regarding the possible sizes of such families of subspaces. Of particular interest is the minimum (infinite) size of such a family, and the spectrum of their possible sizes. We establish that the former is small in certain models of set theory, while the latter can be made arbitrarily large. This talk is in part a sequel to that given by the author at the JMM in 2017. (Received September 20, 2017)