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Gwyneth F Harrison-Shermoen* (gwyneth@math.berkeley.edu), Department of Mathematics, University of California, Berkeley, 970 Evans Hall #3840, Berkeley, CA 94720. Independence relations in NTP1 theories. Preliminary report.

The theory of infinite dimensional vector spaces with a bilinear form over an algebraically closed field is a non-simple theory without the tree property of the first kind. It also has an independence relation satisfying all the properties of independence relations in stable theories except for local character. (This is by work of Nicolas Granger.) In this talk, I shall explain a possible generalization of this independence relation to other structures that can be viewed as limits of certain substructures with simple theories in the way that this infinite dimensional vector space can be thought of as a limit of its finite dimensional subspaces (over the same field). (Received December 13, 2011)