1003-08-432 **Laura Mann Schueller*** (`schuellm@whitman.edu`), Laura Mann Schueller, Department of Mathematics, Whitman College, Walla Walla, WA 99362. *Counting Maximal Subspaces of Zeros of a Quadratic Form Defined Over A Finite Field.*

In this talk, a formula will be given for the number of maximal subspaces of zeros of a quadratic form defined over a finite field. The argument is a simple application of group theory and the final formula depends only on the size of the field, the dimension of the quadratic form, and the Witt index of the quadratic form. (Received September 14, 2004)