Gretchen L. Matthews* (gmatthe@clemson.edu), Department of Mathematical Sciences, Clemson University, Clemson, SC 29634, and Jon-Lark Kim (jl.kim@louisville.edu), Department of Mathematics, University of Louisville, Louisville, KY 40292. On quantum codes from multipoint AG codes. Preliminary report.

Thanks to the pioneering work of Calderbank, Rains, Shor, and Sloane in the binary case and Ashikhmin and Knill in the nonbinary case, classical codes may be employed in the construction of quantum codes. A number of authors have used algebraic geometry codes in this construction. In this talk, we discuss quantum codes defined from multipoint AG codes. (Received February 10, 2008)