1025-05-185 Rieuwert Blok* (rblok@bgnet.bgsu.edu) and Bruce Cooperstein. Projective grassmannians in polar grassmannians.

We consider the k-Grassmannians of a number of polar geometries of finite rank n. We classify those subspaces that are isomorphic to the j-Grassmannian of a projective m-space. In almost all cases, these subspaces are parabolic: they are visible in the diagram of the geometry. However, there are some interesting exceptions that we'll discuss. Results as these can be used to show that an automorphism of a polar grassmannian is induced by an automorphism of the underlying polar space. (Received January 22, 2007)