Bo Guan* (guan@math.osu.edu), Department of Mathematics, Ohio State University, Columbus, OH 43210, and Joel Spruck, Department of Mathematics, Johns Hopkins University, Baltimore, MD 21218. Complete hypersurfaces of constant curvature in hyperbolic Space.

We shall report some results, part of which obtained jointly with Marek Szapiel, on the problem of finding, in hyperbolic space, complete hypersurfaces of constant Weingarten curvature with prescribed asymptotic boundary at infinity. We will discuss several special cases. But our methods apply to a very general class of curvature functions. (Received January 26, 2010)