# Realizing stereographic projections by inversions 



This drawing illustrates an arbitrary $\mathbf{2}$ - dimensional cross - section of a stereographic projection, with the set of all points on the small circle (except for the point at the top) being mapped to the common tangent line for the two circles in the picture. The designated points, where the rays meet the small circle and the tangent line, correspond under stereographic projection and its inverse, and they also correspond to each other under inversion with respect to the larger circle.

