EXAMPLES OF GEOMETRIC TRANSITION IN LOW DIMENSIONS

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Abstract. Roughly speaking, a geometric transition is a deformation of geometric structures on a manifold that "transitions" between different geometries. An example is the classical transition from hyperbolic to spherical geometry, going through Euclidean geometry. In 2011, Danciger introduced a new type of geometric transition, deforming from hyperbolic structures to Anti-de Sitter structure, going through another class of real projective structures called "half-pipe". I will give a broad introduction and overview of this subject, focusing on many examples in dimensions 2, 3 and 4.