

Denise HALVERSON

A Survey on the Busemann Conjecture

Abstract. The Busemann conjecture asserts that all n -dimensional G -spaces are n -manifolds. A G -space is a metric space that satisfies four very basic geometric axioms: (1) Menger convexity; (2) finite compactness; (3) local extendibility; and (4) uniqueness of extension. This presentation will be a survey on the known results and unresolved questions pertaining to the Busemann conjecture.