Michael Jablonski* (mjablonski@math.ou.edu). Non-compact, homogeneous Einstein spaces. In the 1970s, D. Alekseevskii conjectured that if G/K is a non-compact, homogeneous Einstein space with negative scalar curvature, then K is a maximal compact subgroup of G. In this talk, we will present the current state of knowledge, with evidence both for and against the conjecture. (Received January 15, 2015)