ABSTRACT. In the general theory of automorphic forms, an important role is played by *base change*. Base change has a global aspect and a local aspect. In this talk, we focus on the archimedean case of base change for the general linear group $\operatorname{GL}(n, \mathbb{R})$, and we investigate base change for this group at the level of K-theory. We investigate the interaction of base change with the Baum-Connes correspondence for $\operatorname{GL}(n, \mathbb{R})$ and $\operatorname{GL}(n, \mathbb{C})$. If there is time, we will touch on the corresponding result for nonarchimedean local fields.

Joint work with Sergio Mendes, see arXiv:math/0607522v2 [math.KT] and Journal of Noncommutative Geometry 1 (2007) 311–331.