Martin Kerin and Krishnan Shankar\* (shankar@math.ou.edu), Department of Mathematics, 601 Elm Avenue, PHSC 423, Norman, OK 73019. Riemannian submersions from simple, compact Lie groups.

We construct infinitely many examples of Riemannian submersions  $G \longrightarrow B$ , where G is a simple, compact Lie group with bi-invariant metric and B is a smooth Riemannian manifold such that B is not a quotient of G by any group action. This partially answers a question of K. Grove's about the structure of Riemannian submersions from compact, Lie groups. (Received August 20, 2009)