1126-53-127   **Marcus Khuri***, Department of Mathematics, Stony Brook University, Stony Brook, NY 11794.
            Vacuum Black Lenses.

We construct asymptotically flat solutions of the bi-axisymmetric stationary vacuum Einstein equations in 5-dimensions having nondegenerate black holes of lens space topology. This is accomplished by producing the appropriate singular harmonic maps from $\mathbb{R}^3$ to $SL(3,R)/SO(3)$. The method is robust in that it can be used to construct black holes in this setting with all possible topologies, and applies also to the case of 5-dimensional minimial supergravity. This is joint work with Gilbert Weinstein and Sumio Yamada. (Received January 09, 2017)