

1085-53-83

**Lee Kennard\*** ([kennard@math.ucsb.edu](mailto:kennard@math.ucsb.edu)). *On the Hopf conjectures with symmetry.*

We will discuss some Betti number obstructions to the existence of positively curved metrics with large symmetry. As applications, we provide evidence for the two conjectures of Hopf in the presence of symmetry. (Received August 31, 2012)