1067-15-2040   **Mary Clair Thompson*** (`mct0006@tigermail.auburn.edu`), Mathematics and Statistics, 221 Parker Hall, Auburn University, Auburn, AL 36849-5310, and **Tin-Yau Tam** (`tamtiny@auburn.edu`), Mathematics and Statistics, 221 Parker Hall, Auburn University, Auburn, AL 36830. *Determinants of sum of orbits under compact Lie group.*

We study the determinants on the sum of orbits of two elements in the Lie algebra of a compact connected subgroup in the unitary group. As an application, the extreme determinant expressions are obtained for the symplectic group. (Received September 22, 2010)

1