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**Alejandro Adem\*** (adem@math.ubc.ca). *Topology of Commuting Matrices.*

In this talk we will discuss the structure of spaces of commuting elements in a compact Lie group. Their connected components and other basic topological properties will be discussed. We will also explain how they can be assembled to produce a space which classifies certain bundles and represents an interesting cohomology theory. A number of explicit examples will be provided for orthogonal, unitary and projective unitary groups. (Received September 24, 2018)