

Neža Mramor Kosta\* , *University of Ljubljana, Slovenia*

## CW Structure of $G$ -Complexes

We discuss conditions which ensure that a  $G$ -CW complex is  $G$ -homotopy equivalent to a CW complex with cellular action with respect to some CW decomposition of the compact Lie group  $G$ . Extending previous results of Greenlees, May and Perez, who considered 1-dimensional compact Lie groups, we prove that if  $G$  is either the group  $SU(2)$  or any toral group, then for every  $G$ -CW complex  $X$ , there exists a CW complex  $Y$  which is  $G$ -homotopy equivalent to  $X$ , such that the action  $G \times Y \rightarrow Y$  is a cellular map. For general compact Lie groups the problem is still open.

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