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**LIVIU MARE**, University of Regina

*Equivariant cohomology of cohomogeneity one actions*

I will mainly speak about actions of compact Lie groups on closed manifolds whose cohomogeneity (i.e., codimension of principal orbits) is equal to 1. The first result I will mention says that the equivariant cohomology module of any such action is Cohen-Macaulay. A special attention will be paid to the actions which are equivariantly formal. Finally, I will discuss the difficulties that arise in the study of actions whose cohomogeneity is greater than 1. This is joint work with Oliver Goertsches (University of Marburg, Germany).