1043-22-158   **Victor Protsak*** (`protsak@math.cornell.edu`), Malott Hall, Cornell University, Ithaca, NY 14853. *Dirac cohomology of small representations.*

Dirac cohomology of various classes of representations is connected with several classical subjects in representation theory of Lie groups: unitarizability, Borel-Weil theorem, construction of discrete series. In joint work with Pavle Pandzic, we considered the case of certain "small" representations of classical Lie groups that includes unitary highest weight modules with a scalar K-type. We have obtained an explicit combinatorial description of the Dirac cohomology of these modules. (Received August 25, 2008)