Abstract Submitted
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Homology of Lie algebra of supersymmetries and of super Poincare Lie algebra[1] RENJUN XU, Department of Physics, University of California, Davis, ALBERT SCHWARZ, Department of Mathematics, University of California, Davis, MICHAEL MOVSHEV, Department of Mathematics, Stony Brook University — We study the homology and cohomology groups of super Lie algebras of supersymmetries and of super Poincare Lie algebras in various dimensions. We give complete answers for (non-extended) supersymmetry in all dimensions ≤ 11. For dimensions $D = 10, 11$ we describe also the cohomology of reduction of supersymmetry Lie algebra to lower dimensions. Our methods can be applied to extended supersymmetry Lie algebras.

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