



REDUCTION OF COKÄHLER AND 3-COSYMPLECTIC MANIFOLDS

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The notions of coKähler manifolds and 3-cosymplectic manifolds are odd-dimensional analogues of the ones of Kähler manifolds and hyperKähler manifolds, respectively. In this paper, we obtain reduction theorems of coKähler manifolds and 3-cosymplectic manifolds. We show that Kähler and coKähler (hyperKähler and 3-cosymplectic) reductions admit a natural compatibility with respect to “cylinder constructions”. We further prove the compatibility of Kähler and coKähler reductions with respect to the “mapping torus construction”.

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