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Algorithms of making linebundles on cotangent bundles of complete homogeneous spaces more positive.

Let X be the cotangent bundle of a complete homogeneous space of a complex reductive group G and L a linebundle on X . Any cohomology group $H^i(X, L)$ has the structure of a graded AG -module, where A is the ring of global regular functions on X .

We have developed methods to modify pairs (X, L) to similar pairs (X', L') without changing A and without changing some other property like the Euler characteristic (respectively H^0 , or without changing any H^i) but where L' is strictly more positive than L . Modification depends on the property to be preserved.

Joint work with Ascah-Coallier and Jauffret.