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**VICTOR GUILLEMIN**, MIT

*Torus actions with collinear weights*

Let  $G$  be an  $n$ -torus,  $M$  a compact manifold and  $G \times M \rightarrow M$  an action of  $G$  on  $M$  having the property that the fixed point sets are isolated points. For such an action the equivariant cohomology ring of  $M$  sits inside a larger ring: the "assignment ring", (a ring which describes the "orbittype stratification" of  $M$  by fixed point sets of subgroups of  $G$ ), and these two rings coincide if and only if  $M$  is a GKM manifold, i.e. if and only if for every fixed point,  $p$ , the weights of the isotropy action of  $G$  on the tangent space to  $M$  at  $p$  are pairwise non-collinear. In this talk I will describe what happens when one slightly weakens this condition: i.e. requires that at most two weights be collinear.

P.S. The results I will report on are joint with Catalin Zara and Sue Tolman.