

Meeting: 1003, Atlanta, Georgia, SS 20A, AMS Special Session on Commutative Algebra, I

1003-13-1332 **Kia Dalili*** (dalili@math.rutgers.edu), 326 Wayne St, Highland Park, NJ 08904. *The HomAB Problem.*

The HomAB problem is the problem of bounding the number of generators of the module $\text{Hom}(A,B)$ in terms of the numerical invariants of the modules A and B . We prove special cases and collect evidence for the conjecture that the number of generators of $\text{Hom}(A,B)$ is bounded by a polynomial in $\text{hdeg}(A)$ and $\text{hdeg}(B)$. (Received October 05, 2004)