1009-16-120   **Omar D. Saldarriaga*** (`saldarriagao@wpunj.edu`), 109 Green pond rd, Rockaway, NJ 07866.
Using S_k orbits of Z_n^k for computing type A tensor products. Preliminary report.

I have extended a method of computing fusion coefficients for Lie algebras of type A_{n-1} on level k, developed by A. Feingold and M. Weiner using orbits of Z_n^k under the permutation action of S_k on k-tuples. They got the fusion coefficients only for n = 2 and 3 and I extended their results to all ranks and all levels. A further result of my research proved that the method can also be used to compute type A tensor products. I'll addres my talk on how to use the orbits to compute tensor products. (Received August 10, 2005)