Edward L Richmond* (erichmon@email.unc.edu), UNC, CB# 3250, Phillips Hall, Chapel Hill, NC 27599. Horn Recursion for a new product in the cohomology of partial flag varieties SLn/P. Preliminary report.

Horn recursion is a term used to describe when non-vanishing products of Schubert classes in the cohomology of flag varieties G/P are characterized by inequalities parameterized by similar non-vanishing products in the cohomology of "smaller" flag varieties. We consider the partial flag variety SL_n/P and find that $H^*(\operatorname{SL}_n/P)$ exhibits Horn recursion on a certain deformation of the cup product. We also show that if a product of Schubert classes is non-vanishing on this deformation, then the associated structure constant can be written in terms of structure constants coming from induced Grassmannians.

(Received September 05, 2007)