

Meeting: 1001, Evanston, Illinois, SS 1A, Special Session on Modern Schubert Calculus

1001-14-273 **James Ruffo, Yuval Sivan, Evgenia Soprunova*** (esoprun@math.umass.edu) and **Frank Sottile.** *Experimentation in real Schubert calculus for flag manifolds.* Preliminary report.

The Shapiro conjecture in the real Schubert calculus fails to hold for flag manifolds, but in a very interesting way. We give a refinement of that conjecture for the flag manifold and present massive experimentation that supports this conjecture. We also prove many special cases using discriminants and establish relationships between the different cases of the conjecture. (Received August 29, 2004)