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

1001-14-223 **Brian Osserman*** (osserman@math.berkeley.edu), Department of Mathematics, The University of California, Berkeley, CA 94720. *Tranversality of non-general Schubert cycles.*

We discuss the question of transversality of Schubert cycles which are not general, but are associated to osculating flags at general points of the rational normal curve. This question may be rephrased in terms of maps from the projective line to projective spaces with prescribed ramification, and in this context it is natural to ask the same question for higher-genus curves as well. We give a simple degeneration argument using the theory of limit linear series to reduce the problem to the case of three ramification points on the projective line. We also discuss the consequences of this argument for reality of the maps in question. (Received August 26, 2004)