PIERI’S FORMULA VIA EXPLICIT RATIONAL EQUIVALENCE

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ABSTRACT. Pieri’s formula describes the intersection product of a Schubert cycle by a special Schubert cycle on a Grassmannian. We present a new geometric proof, exhibiting an explicit chain of rational equivalences from a suitable sum of distinct Schubert cycles to the intersection of a Schubert cycle with a special Schubert cycle. The geometry of these rational equivalences indicates a link to a combinatorial proof of Pieri’s formula using Schensted insertion.