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Paolo Aluffi* (aluffi@math.fsu.edu), Tallahassee, FL. *Segre zeta functions.*

We define a power series associated with a choice of homogeneous polynomials, encoding Segre class information of corresponding subschemes of projective spaces. We prove that this is a rational function, with poles related to the degrees of the polynomials, and provide a partial description of the numerator of this function. We will also explain how to compute this ‘Segre zeta function’ as an integral over an associated convex body, at least in certain cases. The Segre zeta function has enumerative significance, and may be used to compute certain invariants of (possibly singular) spaces. (Received February 08, 2018)