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**Richard Rimanyi\*** (rimanyi@email.unc.edu) and **Andrzej Weber**. *Schubert calculus in equivariant elliptic cohomology*.

Assigning characteristic classes to singular varieties is an effective way of studying the enumerative properties of the singularities. Initially one wants to consider the so-called fundamental class in  $H$ ,  $K$ , or  $Ell$ , but it turns out that in  $Ell$  such a class is not well defined. However, a deformation of the notion of fundamental class (under the name of Chern-Schwartz-MacPherson class in  $H$ , motivic Chern class in  $K$ ) extends to  $Ell$ , due to Borisov-Libgober. To make sense of the Borisov-Libgober class for a wider class of singularities we introduce a version of it, which now necessarily depends on new ('dynamical' or 'Kahler') variables. We obtain that this elliptic class of Schubert varieties satisfies two different recursions (Bott-Samelson, and R-matrix recursions). The second one relates elliptic Schubert calculus with Felder-Tarasov-Varchenko weight functions, and Aganagic-Okounkov stable envelopes. The duality between the two recursions is an incarnation of 3d mirror symmetry (and symplectic duality). (Received September 13, 2019)