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Degenerating Schubert varieties to unions of toric varieties associated to rc*-graphs*

We construct a flat degeneration of the flag manifold to the toric variety Y associated to the Gel´fand-Cetlin polytope. Every Schubert variety X_w degenerates to a reduced union of toric subvarieties of Y, generalizing results of Gonciulea and Lakshmibai. The faces of the Gel´fand-Cetlin polytope corresponding to the components of the degeneration of X_w are given by rc-graphs. We also explain how this degeneration is related to a construction of cycles representing equivariant Schubert classes in the flag manifold. This construction uses Gel´fand-Cetlin action coordinates and the cycles are glued from pieces indexes by rc-graphs. This is joint work with Ezra Miller.