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Eric Sommers* (esommers@math.umass.edu). *A new method for computing Kazhdan-Lusztig polynomials.* Preliminary report.

I'll presents an algorithm to compute Kazhdan-Lusztig polynomials based upon generalized Bott-Samelson resolutions of Schubert varieties. The algorithm, implemented in C, beats the current fastest program (Coxeter). The underlying mathematics, which is joint work with Jennifer Koonz and based on Koonz's PhD thesis, will also be discussed, including an intriguing connection with the work of Williamson on torsion in intersection cohomology. (Received September 03, 2019)