1093-35-372 Charles L Epstein* (cle@math.upenn.edu), 209 S. 33rd Street, Philadelphia, PA 19104, and Rafe Mazzeo. Degenerate diffusions in population genetics.

We introduce generalized Kimura diffusions, which are degenerate diffusions on manifolds with corners. This class of operators includes limits of the Wright Fisher Markov Models used throughout population genetics. We explain how to prove existence and regularity of solutions to this class of parabolic equations. (Received August 20, 2013)