

Abstract Submitted
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A statistical model for bacterial speciation triggered by lateral gene transfer SUNJEET SIDHU, WEQUIN PENG, Physics Department at The George Washington University — The process of bacterial speciation has been a major unresolved issue in the study of bacterial evolution. It has been proposed that lateral gene transfer and homologous recombination play critical and complementary roles in speciation.¹ We introduce a statistical model, of a population, for the evolution under lateral gene transfer and local homologous recombination. We examine the evolutionary dynamics and its dependence on various evolutionary operators.

¹J. G. Lawrence, *Theor. Popul. Biol.* **61**, 449(2002).

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