

---

**LI LI**, Dalhousie University

*A New Approach to Detect Genetic Recombination in Phylogeny*

Genetic Recombination is a process where parts of different genes are combined to form a new gene. Recombination has large effects on the phylogenetic analysis of DNA sequences, and needs to be identified correctly. We propose a new algorithm for recombination detection based on the site log-likelihood matrix. The method is computationally efficient and shows great ability to detect recombination events. Performance of the method is evaluated on both simulated and real data examples. Results are compared with other methods. abstract