

1173-92-300

**Christine Heitsch\*** (heitsch@math.gatech.edu) and **Svetlana Poznanovic**. *Some combinatorics of RNA branching.*

Understanding the folding of RNA sequences into three-dimensional structures is one of the fundamental challenges in molecular biology. For example, the branching of an RNA secondary structure is an important molecular characteristic yet difficult to predict correctly. However, recent results in geometric combinatorics (both theoretical and computational) yield new insights into the distribution of optimal branching configurations, and suggest new directions for improving prediction accuracy. (Received September 21, 2021)