

1125-AA-2103      **Christine Heitsch\*** ([heitsch@math.gatech.edu](mailto:heitsch@math.gatech.edu)). *The 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, especially for sequences on the scale of viral genomes. However, results from enumerative, probabilistic, analytic, and geometric combinatorics yield insights into RNA structure formation, and suggest new directions in viral capsid assembly. (Received September 19, 2016)