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Anant P Godbole* (godbolea@etsu.edu). *A potpourri of generalized De Bruijn sequences.*

Generalizations of de Bruijn sequences often involve one or more of the following:

- (i) Changing the Rules, e.g., allowing for non-consecutive windows (O-cycles) or introducing larger alphabets when smaller ones do not suffice;
- (ii) Changing the Customary Coding, e.g., encoding subsets with their characteristic vectors rather than their elements;
- (iii) Introducing non-standard objects for which to exhibit de Bruijn cycles, e.g., words with restrictions, lattice paths, subsets of sizes in a range; words with weights in a range; poset-allocations, etc.

This talk will focus on results that use standard methods to exhibit existence of de Bruijn cycles in each of the above three categories. This is joint work with REU students (several), Master's students (1), and PhD students (1) – who will each be identified at the talk. (Received June 05, 2013)