Meeting: 1003, Atlanta, Georgia, SS 26A, AMS-SIAM Special Session on Dynamic Equations on Time Scales; Integer Sequences and Rational Maps, I

1003-12-698 **Franklin Mendivil*** (`franklin.mendivil@acadiau.ca`), Math Dept, Acadia University, Wolfville, NS B4P 2R6, Canada. *Fractals, Graphs, and Fields.*

In this talk, we start out by trying to efficiently generate the attractor of an IFS (Iterated Function System). This quickly leads to a discussion of de Bruijn sequences and ways to generate such sequences. This in turn leads us to considering Eulerian cycles in a certain graph (the *de Bruijn* graph) and then to trying to find generators for the multiplicative group of a finite field. (Received September 27, 2004)