

1067-00-1969 **Clifton Callender*** (clifton.callender@fsu.edu), College of Music, Florida State University,
Tallahassee, FL 32306. *Spira mirabilis, for player piano.*

The focus of this presentation will be ongoing compositional applications and extensions of self-replicating melodies, pioneered by Tom Johnson, and Risset rhythms, rhythmic analogues of Shepard tones, originally created and explored by Jean-Claude Risset. Mapping logarithmic spirals (which Jacob Bernoulli called *Spira mirabilis*) to both the time and pitch (in particular, the circle-of-fifths) domains yields continually accelerating self-replicating lines that are globally chromatic yet continuously modulate through closely-related diatonic collections. (Received September 22, 2010)