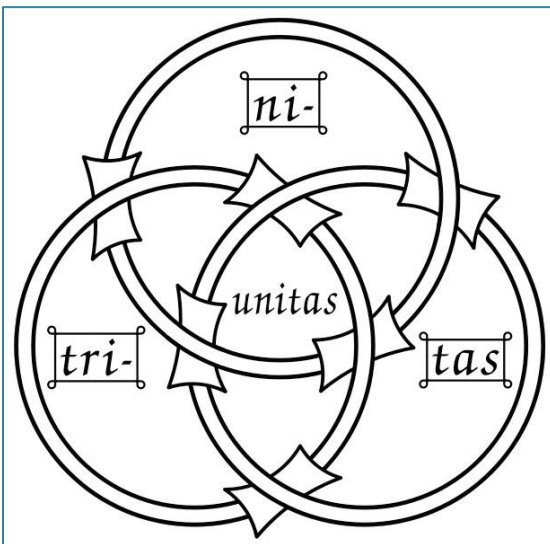


# *The Rainbow Fire-Breathing Topology and Combinatorics of Dante's Trinity*

Arielle Saiber

*Bowdoin College*



This lecture examines Dante's description of the shape, motion, size, color, and configuration of the three giri ("rounds") of the Trinity in *Paradiso* 33.115-120, in order to envision what the Pilgrim "saw" when looking at this great Mystery. The first part of the talk considers possible theological, aesthetic, geometric, and nature-based configurations of three "rings" that may have inspired the Poet. The second part presents the work that mathematician Aba Mbirika and Prof. Saiber have done using topology—specifically, knot theory—and combinatorics to analyze one particularly

suggestive arrangement for the giri: three intertwined circles in a triangular format. Of this figure's many permutations, we isolated two variations (a Brunnian link, also called the Borromean rings; and a (3,3)-torus link) that strongly resonated with many of the qualities of Dante's allusively depicted Trinity.

A reception will follow the seminar.

This program is free and open to the public, but space is limited and registration in advance is required. Register online at:

[www.newberry.org/renaissance](http://www.newberry.org/renaissance)

*Cosponsored with the Devers Program in Dante Studies at the University of Notre Dame;  
and the Italian Cultural Institute of Chicago.*