

# **Santa Fe Science Café For Young Thinkers**

## **“Zooming to Infinity: A Fractal Adventure”**

***Dr. Jonathan Wolfe, The Fractal Foundation***

*Monday, January 28*

*6 – 8 PM*

*Georgia O’Keeffe Museum Education Annex*

*123 Grant Street, Santa Fe*

Fractals are infinitely complex patterns that are created by repeating a simple process. We will explore the fractal patterns in nature all around us, from microscopic neurons to gigantic galaxies. Fractals are the pictures of chaos theory, and each image tells a story about the processes that created it, whether it formed over microseconds or millennia. These dazzlingly beautiful mathematical fractals are infinitely complex, meaning we can zoom into them forever, much, much deeper than any real world objects would allow. The free XaoS software we'll demonstrate is simple enough for children to interactively explore the complex behavior of fractal systems, and fun enough that you'll think you're playing an infinitely deep video game.

The Café is sponsored by the Santa Fe Alliance for Science, the Santa Fe Institute, the Santa Fe Public Schools, the Georgia O’Keeffe Museum and the N.M. Public Education Department.

**Admission is Free.** Youth (ages 13-19) seating a priority. Light refreshments will be served. Dr. Wolfe will also appear on The Santa Fe Radio Café with host Mary-Charlotte Domandi at 8:30 am on Monday, January 28, on KSFR 101.1 FM, streaming on the web live at <http://www.ksfr.org>.

Dr. Wolfe is president of the Fractal Foundation, where he specializes in bringing the beauty of fractals in mathematics, art, science, nature and chaos theory to thousands of people each year.