Fun with transcendental numbers and functions

**Speaker:**
Ronnie Nagloo
*University of Illinois-Chicago*

**When:** 6:30-8:00pm
November 17

**Where:** DERR 333

This talk is open to all undergraduates with an interest in math! The speaker will give lots of definitions, and will only assume their audience has a familiarity with proof (like Discrete Math II or Intro to Advanced Mathematics) and a love of math.

**Abstract**

A real or complex number is said to be algebraic if it is a solution of an equation $F(x) = 0$, where $F$ is a polynomial in one variable with rational coefficient. For example, $\sqrt{2}$ is algebraic since it is a solution of $x^2 - 2 = 0$. On the other hand, a real or complex number is said to transcendental, if it is not algebraic. The most famous examples of such are $e$ and $\pi$. Even though, nearly all real and complex numbers are transcendental, very few numbers have been proven to be transcendental. This talk will be an excursion in the field of transcendental numbers as well as their counterparts in the world of functions.

This talk is part of the Logic@TXST series. For more information (meetings with the speaker, future talks, paid RA opportunities, etc.) visit [https://logictxst.wp.txstate.edu/home/](https://logictxst.wp.txstate.edu/home/) or email the organizer, Will Boney (wb1011@txstate.edu).