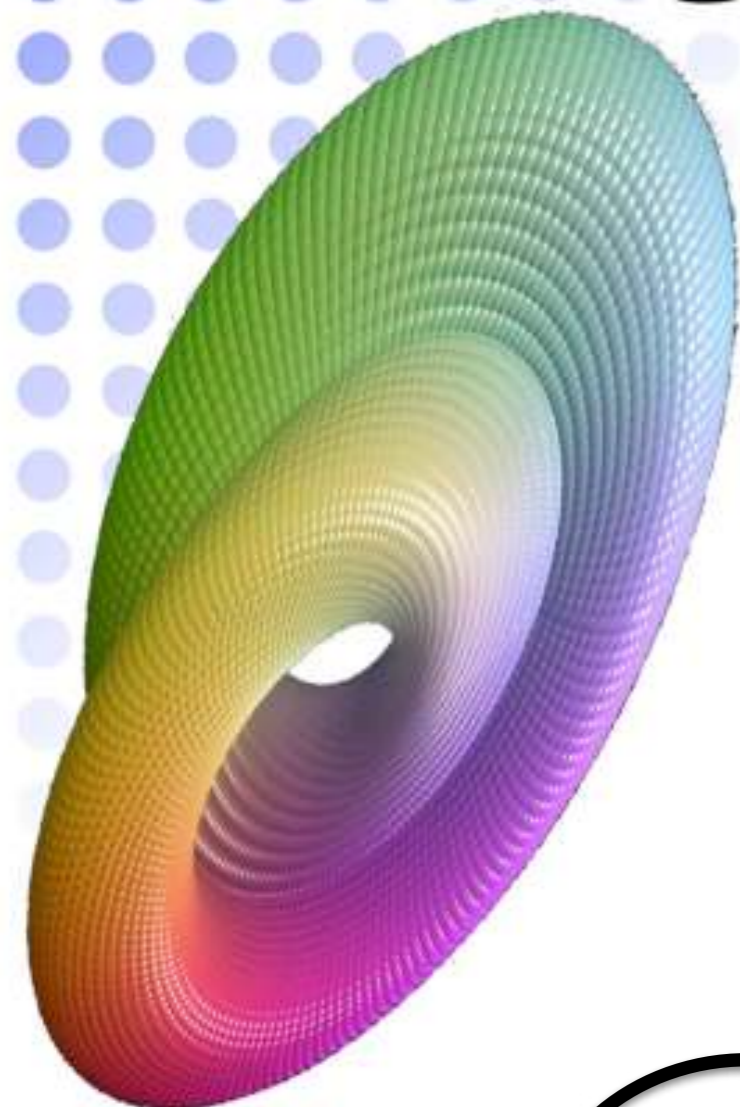


# Michigan Math Club

Thursday at 4pm in the Nesbitt Room

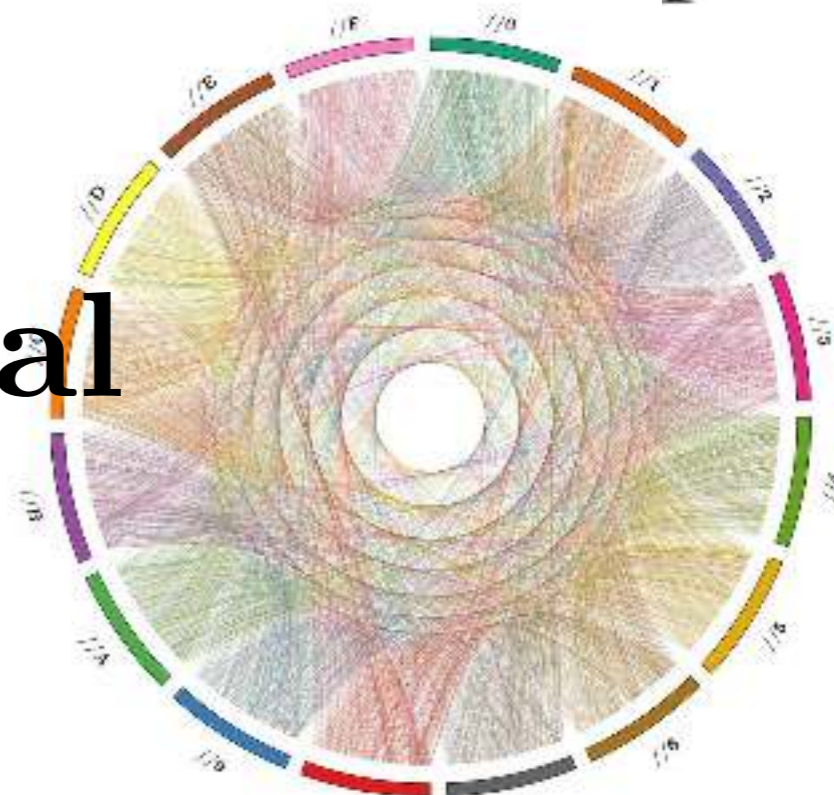
Free Pizza  $\pi$  and Pop



$\pi$  is  
transcendental

Kannappan Sampath

Abstract for 3.14 ( $\pi$  day!)



there will be  
special treats  
in honor of  
 $\pi$  day :)



A complex number is called *transcendental* if it is not a root of a nonzero polynomial with integer coefficients. It is folklore that many mathematical constants that are constructed via a limit procedure (a class that is admittedly very loosely defined) are transcendental. While it can be proven that there are infinitely many transcendental numbers, there are still fascinating open questions about whether a given complex number is transcendental. We will survey some initial developments around the number  $\pi$  in transcendental number theory and prove that it is transcendental. If time permits, we will present some open problems! The talk will be accessible to a wide audience.