Proving Riemann By <u>Ricardo.gil@sbcglobal.net</u> 05/22/2016

Abstract

As non-trivial Riemann zero's grow larger on the 1/2 critical line so does the distance grow proportionally between 0 and 1. Therefore, a non-trivial Riemann zero will not be outside the critical strip or off of the critical line. Second, what the graphs show is Automorphism. 10^13 is inside critical strip (0 & 1) as non-trivial Riemann 0 grows to 10^100 so will the critical strip (0 & 1). Therefore no matter the size of Riemann 0 it will be inside critical strip. In a sense this is a Visual Proof by Automorphism.

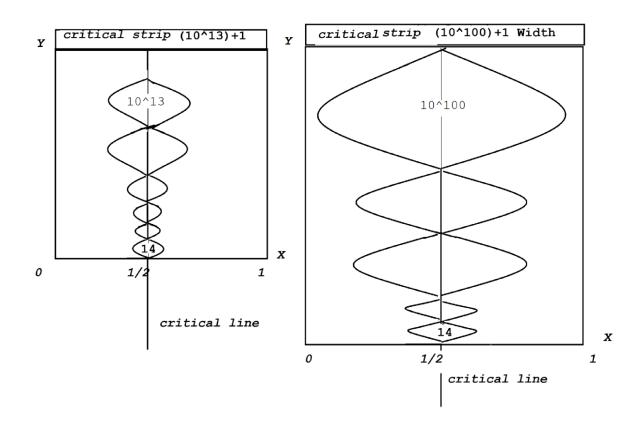
I. Introduction

First here is a Visual Proof. https://en.wikipedia.org/wiki/Proof_without_words . There it shows how Sum of the Numbers, Pythagorean Theorem and Jensen's inequality as a Visual Proof.

II. Visual Proof by Automorphism

Second, "In mathematics, an automorphism is an isomorphism from a mathematical object to itself. It is, in some sense, a symmetry of the object, and a way of mapping the object to itself while preserving all of its structure. The set of all automorphisms of an object forms a group, called the automorphism group. It is, loosely speaking, the symmetry group of the object," Wikipedia." In the critical strip fact that all complex $s \neq 1$ implies that the zeros of the Riemann zeta function are symmetric about the real axis. Combining this symmetry with the functional equation, furthermore, one sees that the non-trivial zeros are symmetric about the critical line Re(s) = 1/2", Wikipedia. My Visual Proof by Automorphism asserts Symmetry about the real axis and Symmetry about the critical line then there is Symmetry between 1/2 10^13 is inside (0,1) then there is Symmetry about the real axis and Symmetry about the critical line then there is Symmetry about the critical line at the height of 1/2 10^100 which is inside (0,1).

III. Visual Proof by Automorphism Graphs



Since there is Symmetry about the real axis and Symmetry about the critical line then there is Symmetry between $1/2 \ 10^{13}$ is inside (0,1) then there is Symmetry about the real axis and Symmetry about the critical line at the height of $1/2 \ 10^{100}$ which is inside (0,1).