

1135-VK-1952 **V N Tran*** (thangntran@netzero.net), 13092 Allard Ave #D, Garden Grove, CA 92840.
Pathway to Riemann Hypothesis. Part I. Preliminary report.

It has been a while since David Hilbert addressed the 23 unsolved problems in 1900. The Riemann Hypothesis states: “The real parts of the complex zeros of the so-called Riemann Zeta’s function lie on the line $x = \frac{1}{2}$ of the complex plane \mathbb{C} .” It has been over 11 decades and a solution is still nowhere to be found. In this series of investigations, we try to reach to the current status of the problem. In this first presentation, we will begin with an investigation on the point at infinity $\{\infty\}$ as a candidate solution of the equation $n^2 - (n^2 - 1) = 0$, where $n \in \mathbb{N}$. Note that $\{\infty\}$ is more well-known in the presence of the construction of the Riemann sphere, $\mathbb{C} \cup \{\infty\}$, which is also known to be one-point compactification. Is it possible that Riemann had more in mind, perhaps a deeper connection between the fields of geometry, analysis, algebra, and more? Maybe it takes at least a set of axioms to piece all of these possibilities together. For this, we will learn and teach ourselves how this comes about before we reach to the statement above in this presentation. Parts II, III, . . . , if possible, will be brought about in follow-up presentations, due to limitation of technicality as well as of the organization’s policy. (Received September 26, 2017)