The zeta function was defined by Euler in 1740, as an infinite series that converges in $x > 1$, and became the Riemann zeta function in 1859, when it was extended analytically to the whole complex plane (less its pole at $z = 1$), through the Riemann functional equation.

In his paper about the distribution of primes, Riemann claimed that all the zeros of the zeta function $\zeta(z)$ in the strip $0 < x < 1$, are on the line $x = \frac{1}{2}$.

Riemann’s claim, became known as the Riemann Hypothesis. Hilbert presented that Hypothesis as his 8th problem. It is the only Hilbert problem that remained unsolved to date.

We prove Riemann’s Zeta Hypothesis
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