A NEW PERSPECTIVE OF
THE TWIN PRIME CONJECTURE

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“Innovation is not the product of logical thought, even
though the final product is tied to a logical structure.”
---------- Albert Einstein

The twin prime conjecture [1] is a beautiful open problem in Number Theory about
primes, a pair of primes are called twin primes such as {11,13}, {29,31} or {101,103}
of the form {p, p+2}, and the twin prime conjecture states that there exist infinitely
many primes p such that p+2 is also prime [1].

Since p and p+2 all is odd primes in every pair of twin primes of the form {p, p+2},
thus, there must be 2|p+1 and p+1≥4, assume p+1=2n, n∈N; then there be 2n≥4, n≥2,
p=2n−1, p+2=2n+1,and (2n+1)=(2n−1)+2, therefore, a pair of twin primes of the form
{p, p+2} is also a pair of primes of the form {2n−1,2n+1}. At the same time, the twin
prime conjecture states is equivalently converted to that there exist infinitely many
evens 2n such that 2n±1 all be odd primes.

Essentially, either way of expression, both are expressing the same proposition that
there are infinitely many twin primes.

References
Section II, Divisors and Primes in Multiplicative Number Theory, 8--Prime Numbers, 8.4,
notes.3, 287