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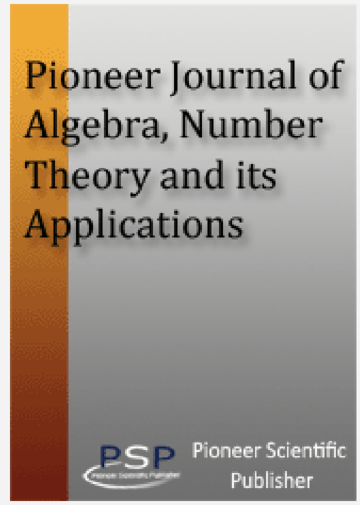

THE THEOREM OF THE PRIMAL RADIUS

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Abstract

The present algebraic development begins simply by an exposition of the data of the problem. Our calculus is supported by a reasoning which must conduct to impossibility. We define the primal radius: For all x an integer greater or equal to 3, we define a primal number r for which $x - r$ and $x + r$ are prime numbers. We see then that Goldbach conjecture would be verified because $2x = (x + r) + (x - r)$. We prove the existence of r for all $x \geq 3$. We prove also the existence, for all x' an integer, of a primal radius r' for which $x' + r'$ and $r' - x'$ are prime numbers strictly greater than 2. De Polignac conjecture would be quickly verified because $2x' = (x' + r') - (r' - x')$.

Keywords and phrases: primal radius, Goldbach conjecture, algebraic development.