
The Riemann zeta-function, its alternating version and their q-analogs

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The Riemann zeta-function appears in different branches of physics and mathematics. Here we consider q-analogue for zeta-function and its alternating version. Their values at negative integer numbers are calculated using functional series. Euler's formulas are obtained at the classical limit $q \rightarrow 1$.

Keywords: Riemann zeta-function, quantum analysis, q-analogue, classical limit.

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