

ON FIBONACCI q -MULTIPLE ZETA VALUES

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ABSTRACT

We introduce a finite q -analogue of multiple zeta values involving modified Fibonacci polynomials. This family provides a natural extension of the classical multiple zeta values, recovering them in the limiting case as $q \rightarrow 1$ and the truncation parameter tends to infinity. We establish explicit forms for several classes of these finite q -series at roots of unity and investigate their arithmetic properties.

Keywords q -multiple zeta values · Fibonacci polynomials

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