

Quantum K-theory at roots of unity

Wednesday 8 October 2025 11:30 (1 hour)

I will describe how the quasimap approach to equivariant quantum K-theory is modified when the curve-counting parameter is sent not to unity, but to a primitive root of unity instead. In particular, this leads to the appearance of the Frobenius action on the moduli space. Upon reducing the quantum difference equation modulo primes, we arrive at the Grothendieck–Katz p -curvature and prove that it is isospectral to a standard curvature operator precomposed with Frobenius.

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