Summary: The basis elements spanning the Sato Grassmannian element corresponding to the KP $\tau$-function that serves as generating function for rationally weighted Hurwitz numbers are shown to be Meijer G-functions. Using their Mellin-Barnes integral representation the $\tau$-function, evaluated at the trace invariants of an externally coupled matrix, is expressed as a matrix integral. Using the Mellin-Barnes integral transform of an infinite product of $\Gamma$ functions, a similar matrix integral representation is given for the KP $\tau$-function that serves as generating function for quantum weighted Hurwitz numbers.

For the entire collection see [Zbl 07262210].

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References:


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