Since Hankel matrices are moments of positive continuous functions, they form positive definite quadratic forms.

Guido Mazzuca  
SISSA, Trento

Gaussian alpha ensemble and an application to Toda lattice

In my talk I will introduce a tridiagonal random matrix models related to the classical Gaussian α-ensemble in the high temperature regime, i.e. when the size $N$ of the matrix tends to infinity with the constraint that $\alpha N = 2\beta$ constant, $\beta > 0$. I will show how to explicitly compute the mean density of states and the mean spectral measure for this ensemble. Finally, I will apply this result to compute the mean density of states for the periodic Toda lattice in thermal equilibrium.


Wednesday, 09 December 2020, 0900 hrs CET

Zoom Konferenzschaltung—Please contact Thorsten Neuschel (thorsten.neuschel@math.uni-bielefeld.de) for details regarding access