

# Random matrices and magnetic amplitude for discretized strings

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Magnetic amplitudes for strings in a background 3-form  $H$  involve a 2-form potential  $B$  integrated on surfaces of arbitrary topology. We propose a random matrix model whose topological expansion lead to a discretized version of these amplitudes, in the case of a propagation on an finite space  $X$  quotiented by a finite group  $G$ . Besides the fluxes induced by  $B$ , they also involve topological defects on the surface, weighted by additional fields that are constructed using the group cohomology of  $G$ .

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