

Local systems on Deligne-Mumford stacks

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Studying local systems on proper Deligne-Mumford stacks provides a useful intermediate step between the projective and quasiprojective cases. The same tools as in the projective case carry over, but parabolic structures with rational weights are introduced. We look at several aspects such as the Chern classes of parabolic bundles, the study of moduli spaces on orbicurves over \mathbb{P}^1 using Katz's algorithm, and the role played by DM-stacks in factorization results.