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„Perverse sheaves and schobers on Riemann surfaces.“

Abstract:

Reporting on joint work with M. Kapranov, V. Schechtman, and Y. Soibelman, I will explain how to describe the derived constructible category of a stratified Riemann surface as representations of the so-called paracyclic category of the surface. This allows for geometric descriptions of the various t-structures of interest (including the perverse one) and their interplay with Verdier duality. We will then discuss how this leads to an approach to categorified perverse sheaves (perverse schobers) and provide some examples.