

Modularity and links in the intersection numbers of p -spin curves

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We discuss the cases of integer and half integer spin p (negative and positive) curves as Gromov-Witten invariants, i.e. the counting functions of holomorphic embedding of curves into variety of a point. D_n types in the singularity theory is included. These cases are linked to Waring's problem through Levy integral in the number theory. The algebraic and Picard-Fuchs equations are investigated for p -spin curve as a mirror symmetry. This study is motivated by Zagier's recent exposition.

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