

The Period Map for Quantum Cohomology of \mathbb{P}^2

Todor Milanov

*Kavli IPMU (WPI), UTIAS, The University of Tokyo
Kashiwa, Chiba 277-8583, Japan
todor.milanov@ipmu.jp*

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For a given a semi-simple Frobenius manifold we define a ceratin period map and propose the problem of finding its inverse. Our definition is motivated from mirror symmetry and the applications that we have in mind are related to reconstructing Gromov–Witten invariants in terms of the monodromy data associated with quantum cohomology. In the first part of my talk, I would like to explain the general settings, while in the second part my plan is to explain the case of quantum cohomology of \mathbb{P}^2 . Our main result says that the inverse of the period map can be described in terms of the Eisenstein series $E_4(\tau)$ and $E_6(\tau)$.

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