

## **abstract**

COMPLEX ALGEBRAIC GEOMETRY

Topic:

Speaker:

Affiliation:

Date:

Time/Room:

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In 1991, Witten proposed a famous conjecture (solved by Kontsevich) related the intersection theory of Deligne-Mumford moduli space to KDV-integrable hierarchy. To generalize his conjecture, Witten proposed a remarkable PDE based any quasihomogeneous singularity. The moduli problem of Witten equation was conjectured to be the generalization of the intersection theory of Deligne-Mumford moduli space and related to more general KP-hierarchy. In the talk, we will present a scheme to solve the moduli problem of Witten equation. In particular, we will give an affirmative answer to Witten's conjecture. Furthermore, our model leads to a construction of Landou-Ginzburg A-model, which is still missing in physics. Possible future application will be discussed.