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# Joint Geometric Analysis Seminar

(Part of MIST program)

## *J-equation and deformed Hermitian- Yang-Mills equation on holomorphic vector bundles*

*Prof. Ryosuke Takahashi  
Tohoku University*

### *Abstract*

In general, the equivalence of the stability and the solvability of an equation is an important problem in geometry. In this talk, we introduce the J-equation on holomorphic vector bundles over compact Kaehler manifolds, as an extension of the line bundle case and the Hermitian-Einstein equation over Riemann surfaces. We investigate some fundamental properties as well as examples of them. Also, we discuss an application for the vector bundle version of the deformed Hermitian-Yang-Mills equation in the small volume regime.

Date: October 6, 2023 (Friday)  
Time: 3:00pm-4:00pm (Hong Kong time)  
ZOOM link: <https://cuhk.zoom.us/j/91805734715>

*All are Welcome*