

Research Report (April, 2020- March, 2021)

Enrollment from
April 2017

Department of Pure and Applied Mathematics

Ryosuke ODOI

I. List of Papers

None

II. List of Talks

None

III. Research Results in AY2020

I made advances in calculating the asymptotic constant of the tau-function of the tt^* -Toda equations which corresponds to the local (not necessarily global) solutions. (Results in AY2019 is for the global solutions.) In particular, I partially deformed a Riemann-Hilbert problem which is necessary to solve to calculate the asymptotic constant.

IV. Research Plan for AY2021

I would like to solve the Riemann-Hilbert problem.

And I would like to obtain a geometric formulation of the symplectic form related to monodromy data of the tt^* -Toda equations.