

Non-triviality of the modified diagonal cycles of hypergeometric curves

2025年10月23日(木) 16:10~17:10 理学部1号館321室(大セミナー室) 講演者:根本 裕介(千葉大学)

The modified diagonal cycles are important examples of algebraic cycles that are generically homologically trivial but algebraically non-trivial. However, it is difficult to show the non-triviality for the modified diagonal cycles of specific curves. In this talk, we consider hypergeometric curves (which are introduced by Asakura-Otsubo) that are closely related to Gaussian hypergeometric functions and Fermat curves. We prove that the Abel-Jacobi images of the modified diagonal cycles of hypergeometric curves are non-trivial under some assumptions. This is a joint work with P. Eskandari.