



DEPARTMENT OF MATHEMATICS AND COMPUTER SCIENCE

Colloquium

AUTOMORPHY OF CERTAIN HYPERGEOMETRIC GALOIS
REPRESENTATION

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ABSTRACT:

Hypergeometric family contains important arithmetic objects like elliptic curves. Just as the Tate module of elliptic curve, hypergeometric Galois representations are naturally constructed from hypergeometric family, and are predicted to arise from automorphic forms by Fontaine-Mazur conjecture. In this talk, we provide some evidence of such a prediction via automorphy lifting theorem and certain symmetry of hypergeometric functions. This is a joint work with Wen-Ching Winnie Li and Ling Long.

4 – 5pm

Wednesday, April 24, 2024

Room 204, Smith Hall