



DEPARTMENT OF MATHEMATICS AND COMPUTER SCIENCE

## Colloquium

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THE FONTAINE-MAZUR CONJECTURE IN DIMENSION TWO

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**ABSTRACT:**

The Fontaine-Mazur conjecture predicts which two-dimensional  $p$ -adic representations of the absolute Galois group of  $\mathbb{Q}$  arise from modular forms. In this talk, I will explain this conjecture by some concrete examples and report some recent progress which relies on some recent developments of  $p$ -adic geometry.

4 – 5pm  
Wednesday, April 3, 2024  
Room 204, Smith Hall