

# Philadelphia Area Number Theory Seminar

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## Polynomial identities between Hecke eigenforms

**Abstract:** This talk will focus on polynomial identities between Hecke eigenforms. In particular we will show that assuming Maeda's conjecture, then all solutions to the equation  $X^2 = \sum a_j Y_j$  in terms of Hecke eigenforms for  $SL_2(\mathbb{Z})$  or  $SLX$