

# ALGEBRA SEMINAR

## *Around MacMahon's Master Theorem, I*

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MacMahon's "Master Theorem" is a proposition about determinants which dates back to (at least) 1917. The theorem has had numerous applications, especially in combinatorics, and many different proofs can be found in the literature. In this series of three talks, I plan to (1) state the theorem in various ways, (2) explain some connections with Hilbert series in invariant theory and give a (possibly new) proof of the theorem, and (3) discuss a new "quantum" version of the Master Theorem that was recently published by Garoufalidis, Tq Lê and Zeilberger.

Monday, October 31, 2005, 1:40 – 2:30 pm,  
Wachman 617