Time: Tuesday October 17, 2017 3:00 p.m.

Location: Skiles 169

Speaker: Maxie Schmidt

Title: Partition Identities Related to Stanley's Theorem

Abstract: In a recent article to appear in the American Mathematical Monthly next

year, we use the Lambert series generating function for Euler’s totient

function to introduce a new identity for the number of 1’s in the

partitions of n. New expansions for Euler’s partition function p(n) are derived

in this context. These surprising new results connect the famous classical

totient function from multiplicative number theory to the additive theory

of partitions. We will define partitions and several variants of Euler's

partition function in the talk to state our new results.