

1135-VS-1186 **John E. Mosley*** (jmosley@exeter.edu). *The Greatest Common Divisor of Multinomial Coefficients.*

While studying a certain characteristic number of a class of special unitary manifolds, we noticed the calculation was simply computing a multiple of a multinomial coefficient. We were, at the time, interested in computing the greatest common divisor of these characteristic numbers. From that emerged a fun and interesting number theory problem. In this talk, I will present the solution to this problem, which gives the greatest common divisor of certain multinomial coefficients. (Received September 20, 2017)