Mandi A. Schaeffer Fry* (aschaef6@msudenver.edu), MSU Denver Math, P.O. Box 173362, Campus Box 38, Denver, CO 80217, and Eugenio Giannelli, Carolina Vallejo and Noelia Rizo. On Prime Numbers and Character Degrees.

A theorem of Thompson studies the structure of finite groups with exactly one irreducible character degree not divisible by a given prime. I will discuss two recent variations of Thompson's theorem. Namely, in joint work with E. Giannelli and C. Vallejo, we prove a variation for pairs of primes, and with E. Giannelli and N. Rizo, we prove a variation in the case that exactly two degrees are not divisible by a given prime. (Received August 18, 2019)