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Larry Rolen* (larry.rolen@vanderbilt.edu), **Zack Tripp** and **Ian Wagner**. *Cranks for partition function congruences.*

Dyson famously defined his partition rank function, which he conjectured "explains" Ramanujan's congruences mod 5,7. Building on his speculation, Garvan and Andrews-Garvan later discovered a "crank" function which explains the Ramanujan congruences mod 5,7, and 11. Here, we describe how the family of colored partitions and their Ramanujan-type congruences fit into the recent theory of theta blocks, due to Gritsenko, Skoruppa, and Zagier. We describe a method for producing new families of crank functions. This method should be useful for further studies of partition functions. (Received August 17, 2020)