Joseph M Landsberg* (jml@math.tamu.edu), 1706 Brazoswood Dr., Texas A&M University, College Station, TX 77840. Lower bounds for matrix multiplication.

Ever since Strassen's 1968 discovery that the way we usually multiply matrices is not the optimal one, there has been extensive research regarding just how fast matrices may be multiplied. This talk will focus on lower bounds for matrix multiplication. After briefly reviewing the history, I will explain recent exciting developments using representation theory and algebraic geometry. This is joint work with A. Conner, A. Harper and H. Huang. (Received March 08, 2021)