1171-13-116      **Michael DiPasquale\*** (mdipasquale@southalabama.edu), **Chris Peterson**, **Luca Chiantini**, **Cristiano Bocci** and **Andrea Mazzon**. *Curves passing through points in projective space.* Preliminary report.

In this talk we will outline a simple algorithm which detects the existence of a curve of degree d and genus g passing through a set of points in projective space. We give two applications of this algorithm: one to Waring decompositions and the other to computing certain Gromov-Witten invariants of projective three-space. This is a preliminary report on joint work with Chris Peterson, Luca Chiantini, Cristiano Bocci, and Andrea Mazzon. (Received August 09, 2021)