Denise A Rangel Tracy* (d.a.rangeltracy@ccsu.edu). Totally Reflexive Modules.

In this talk for non-experts, we will discuss the notion of totally reflexive modules, also known as Gorenstein projective modules, which can be precisely defined using tools from homological algebra. The questions of their existence and abundance will be address. In addition, for a special case, we can give a complete description of these modules via matrices. (Received September 22, 2017)