

1166-41-128

Beihui Yuan* (by238@cornell.edu), **Mike Stillman** and **Hal Schenck**. *A counter-example to the Schenck-Stiller “ $2r + 1$ ” conjecture.*

To approximate a function over a region, it is useful to consider a subdivision of the region and then approximate the function by a piecewise polynomial. In this talk, I would like to talk about what we know about splines, commutative algebra tools we use to study this subject, conjectures on splines and a counter-example to the Schenck-Stiller “ $2r + 1$ ” conjecture. This talk is based on joint work with Mike Stillman and Hal Schenck. (Received February 15, 2021)