Frank-Olaf Schreyer: Â Matrix factorizations and models of curves in P^4

For curves in P³ the Hilbert-Burch theorem applied with vector bundles gives methods

for constructions of curves. In the talk I will explain, how matrix factorizationsÂ

may serve similarly to construct a flag of a curve and a hyperfurface in P⁴.

I apply illustrate this technique for curve of genus g=15 to 20.