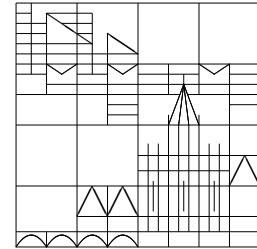


Universität Konstanz
Fachbereich Mathematik und Statistik
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Summer 2015



CLASSICAL ALGEBRAIC GEOMETRY

8th problem sheet
Tutorial on 9 June 2015

1. Let $X \subset \mathbb{P}^n$ be a set of d points and let h_X be the Hilbert function of X .
Show that $h_X(m) = d$ for all $m \geq d - 1$. ([Ha], Ex. 13.1)
2. Find the Hilbert function of the rational normal curve in \mathbb{P}^d .