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Constructing bases for homogenous three variable integer valued polynomials

A polynomial over $\mathbb{Q}[x, y, z]$ is integer valued if $f(x, y, z) \in \mathbb{Z}$, whenever x, y, z are integers. This talk will look at the case of f being homogeneous and try constructing polynomials such that the denominators are divisible by the highest prime power possible. This will be achieved by forcing one of the variables to be evaluated at odd values only, and taking the intersection of those sets.