

Nodal hypersurfaces in P^4 and Cayley–Bacharach conjecture

Jihun Park
POSTECH

Abstract

It is conjectured that a nodal hypersurface of degree d in P^4 with at most $(d-1)^2-1$ nodes is factorial. We show that the conjecture is true for the cases $d < 8$. Also, several evidences are given by Cayley–Bacharach conjecture and generic projections.