1056-05-1785 Alexander Postnikov* (apost@math.mit.edu), 77 Mass Ave, Cambridge, MA 02139, and Federico Ardila. Power Ideals.

A power ideal is an ideal in the polynomial ring generated by powers of some linear forms. Examples of such ideals appear in many different areas of mathematics, say, in Schubert calculus and in box spline theory. We study several classes of ideals of this form and calculate their Hilbert series. We discuss their combinatorial properties, connections with hyperplane arrangements, Tutte polynomial, and parking functions. (Received September 22, 2009)