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47907-2067. *Arithmetic Rank of Unmixed Bipartite Edge Ideals.*

Arithmetic rank of an ideal  $I$  in a ring  $R$  is the least number  $s$  such that there exists elements  $a_1, \dots, a_s \in R$  such that  $\sqrt{I} = \sqrt{(a_1, \dots, a_s)}$ . We compute the arithmetic rank of unmixed bipartite edge ideals, and show that, the arithmetic rank of certain Cohen-Macaulay edge ideals equals their height. (Received August 13, 2009)