## 1014-13-1657 Alberto Corso and Uwe Nagel\* (uwenagel@ms.uky.edu), University of Kentucky, Department of Mathematics, 715 Patterson Office Tower, Lexington, KY 40506-0027. *Ferrers ideals.* Preliminary report.

Each partition  $\lambda = (\lambda_1, \lambda_2, \dots, \lambda_n)$  determines a so-called Ferrers tableau to which we associate a bipartite graph. Its edge ideal is a squarefree monomial ideal that is generated by quadrics. We call it a Ferrers ideal and study its properties. It turns out that all Ferrers ideals have a linear minimal free resolution which we completely describe, including the maps. We also determine the primary decomposition of the Ferrers ideals and show that a Ferrers ideal is unmixed if and only if it is Cohen-Macaulay. In this case its special fiber ring is Gorenstein.

Possibly, higher-dimensional analogues of these results will also be discussed. (Received September 28, 2005)