

1131-13-336

Oana Veliche*, 360 Huntington Avenue, Boston, MA 02115, and **Lars Winther Christensen**
and **Jerzy Weyman**. *Linkage classes of grade three perfect ideals*. Preliminary report.

We say that a local ring $R = Q/I$, with Q a regular local ring and I a grade 3 ideal, has the format $(1, m, m + n - 1, n)$ if the minimal free resolution of R over Q is of the form $0 \leftarrow Q \leftarrow Q^m \leftarrow Q^{m+n-1} \leftarrow Q^n \leftarrow 0$. Associated to this format is a graph with three arms of lengths n , $m - 3$ and 1 attached to a central vertex. The classification of generic resolutions associated to these graphs, obtained by Jerzy Weiman, suggests that the Dynkin graphs (formats) play a special role. We investigate whether these formats are special from the point of view of linkage. When the format is not Dynkin, we can find a perfect ideal with the resolution of that format which is the smallest in its linkage class. We conjecture, and give evidence for it, that if the format is Dynkin then the ideal is in the linkage class of a complete intersection (licci). (Received July 18, 2017)