Oana Veliche*, 360 Huntington Avenue, Boston, MA 02115, and Lars W. Christensen and Jerzy Weyman. Free resolutions of Dynkin format and licci property.

Let I be a perfect ideal of grade 3 in a regular local ring Q. To each minimal free resolution $0 \leftarrow Q \leftarrow Q^m \leftarrow Q^{m+n-1} \leftarrow Q^n \rightarrow 0$ of Q/I over Q one attaches a format (1, m, m+n-1, n) and a graph. Recent work on generic resolutions of length 3 obtained by Jerzy Weyman suggests that when the graph is Dynkin the ideal is special. We conjecture that every ideal of Dynkin format is licci (linked to a complete intersection ideal) and if the format is not Dynkin then there exists an ideal of that format that is not licci. We give evidence for the former and prove the latter for the local ring $Q = k[x_1, x_2, \dots, x_e]_{(x_1, x_2, \dots, x_e)}$, where k is a field and $e \geq 3$. (Received August 19, 2019)