1012-05-104 **Monica Vazirani*** (vazirani@math.ucdavis.edu), UC Davis, Department of Mathematics, One Shields Ave, Davis, CA 95616-8633. *An observation on highest weight crystals.*

A crystal graph is a colored directed graph satisfying certain axioms. Stembridge gave a "local characterization" of those crystal graphs attached to highest weight modules of Lie algebras of simply laced type. In other words, he gave a purely graph-theoretic way of recognizing those graphs. In this talk, we observe another property these graphs have, in all classical types. If a node has a single "parent" and "grandparent," then all its ancestors share this property, and such nodes are characterized in terms of a level 1 perfect crystal. Although not a characterizing property of the crystal, it is surprising in its rigidity. (Received September 12, 2005)