

1011-13-364

Karen Anne Chandler* (chandlerk@ums1.edu), University of Missouri - St. Louis, Department of Math and Computer Science, St. Louis, MO, and **Pit-Mann Wong**. *The Green-Griffiths-Kobayashi conjectures on algebraic degeneracy.*

Green-Griffiths, and Kobayashi conjectured that each holomorphic map $\mathbb{C} \rightarrow S$ to a surface $S \subset \mathbb{P}^3$ of degree at least 5 must be *algebraically degenerate*; that is, the image has dimension strictly less than that of S . One has further: precise conditions on S that determine degeneracy; the extension to higher dimension; and Kobayashi's conjecture: that if S is a very general surface any such map $\mathbb{C} \rightarrow S$ must be constant. We shall present the proof of these conjectures on surfaces, focusing on the algebraic aspects. This involves the use of jet bundles, as analytic extensions of symmetric powers. (Received August 30, 2005)