1041-14-91Anthony V Geramita\* (anthony.geramita@gmail.com), Dept. of Mathematics and Statistics,<br/>Queen's University, Kingston, Ontario K7L 4E8, Canada, and Enrico Carlini and Luca<br/>Chiantini. Complete Intersection Points on General Surfaces in Projective 3-space. Preliminary<br/>report.

A set of points in 3-space is a complete intersection if its defining ideal in k[x,y,z,w] is generated by three forms, say of degrees a,b,and c. We call such a reduced scheme a CI(a,b,c).

The question we deal with is the following: when does the general surface of degree d in 3-space contain a CI(a,b,c)? For any a,b,and c we give an answer (yes or no!) which is true for all sufficiently large d.

The proof involves an interpretation of the problem in the language of secant varieties and some comments on a conjecture of Froberg. (Received August 05, 2008)