1035-13-130        **Erik Stokes\*** (`estokes@ms.uky.edu`). *The Arithmetic Degree of Squarefree Strongly Stable Ideals.*

For a squarefree ideal, $I$, the arithmetic degree of $I$ is the number of facets of the simplicial complex which has $I$ as its Stanley-Reisner ideal. We consider the case when $I$ is squarfree strongly stable, in which case we give an exact formula for the arithmetic degree in terms of the minimal generators of $I$ as well as a lower bound resembling that from the Multiplicity Conjecture. Using this, we can produce, in characteristic 0, an upper bound on the number of minimal generators of Cohen-Macaulay ideals with arbitrary codimension extending Dubreil's theorem for codimension 2. (Received July 26, 2007)