1016-14-160   **Donu Arapura*** (`dvb@math.purdue.edu`), Dept. of Math., 150 N. University Street, Purdue University, West Lafayette, IN 47907. *The image of the Chern class map for singular varieties.*

When X is a smooth complete variety over C, its well known that the Chern classes of a vector bundle in rational cohomology are Hodge classes, i. e. classes of type (p,p). When X is singular, the notion of Hodge class can be generalized using mixed Hodge theory, and it is not difficult to see that Chern classes of vector bundles are again of this type. However there are now further constraints on these classes that I want to explain. This phenomenon was first noticed by Barbieri-Viale and Srinivas for line bundles about 10 years ago. (Received February 10, 2006)