

1086-14-1758      **Chris Peterson\*** ([peterston@math.colostate.edu](mailto:peterston@math.colostate.edu)). *Special sections of locally free sheaves.*

Let  $\mathcal{E}$  be a rank  $r$  locally free sheaf on  $\mathbb{P}^n$  with  $r \leq n$ . Assuming  $\mathcal{E}$  is globally generated, the vanishing locus of a general section of  $\mathcal{E}$  will be a smooth variety of codimension  $r$ . A section of  $\mathcal{E}$  is called special if its vanishing locus fails to be smooth and/or fails to have the expected codimension. This talk will discuss three examples involving special sections with emphasis placed on the related geometry. (Received September 24, 2012)