1014-14-782 **Gian Mario Besana*** (gbesana@cti.depaul.edu), School of CTI, 243 S Wabash, Chicago, IL 60604, **Sandra DiRocco** (sandra@math.kth.se), Department of Mathematics, Royal Institute of Technology, Stockholm, Sweden, and **Antonio Lanteri**, Dipartimento di Matematica, Via Saldini 50, Milano, Italy. *Higher Order Bad Loci.* Preliminary report.

A point of a projetcive variety is said to be bad for a given linear system if every element of the system,containing the point, is forced to be reducible. In this work the notion of bad point is generalized to bad zero-schemes of positive length. Bad zero-schemes for ample and free linear systems are studied. Particular attention is given to linear systems giving higher order embeddings. Relationships among the minimal length of such zero-schemes, the positivity of the line bundle associated with the linear system, and the dimension of the variety are established. (Received September 23, 2005)