1038-14-147 Nero Budur* (nbudur@nd.edu), Department of Mathematics, 255 Hurley Hall, Notre Dame, IN 46556. Connections between D-modules and multiplier ideals.

The complexity of the singularities of a divisor D in a nonsingular variety X is somewhat encoded in the multiplier ideals of D. It is known that multiplier ideals are related to the V-filtration on \mathcal{D} -modules. A natural question is what other \mathcal{D} -modules reflect the singularities of D. We will describe a connection between certain local systems on X - D and the multiplier ideals of D. (Received February 05, 2008)