

**Meeting:** 1003, Atlanta, Georgia, SS 14A, AMS Special Session on D-Modules, I

1003-14-661      **Jose Maria Ucha\*** ([ucha@us.es](mailto:ucha@us.es)), Depto. de Algebra. Universidad de Sevilla, Avda Reina Mercedes s/n, 41012 Sevilla, Spain, and **Francisco Jesus Castro-Jimenez**. *The Logarithmic Comparison Theorem and Free Divisors*.

We propose a computational criterion to test if a free divisor  $D \equiv (f = 0) \subset \mathbf{C}^n$  verifies the *Logarithmic Comparison Theorem* (LCT), that is whether the complex of differential forms computes the cohomology of the complement in  $\mathbf{C}^n$ . We also present some conjectures related to this problem. (Received September 27, 2004)