1052-13-166   **Sonja Mapes*** (`smapes@math.duke.edu`), Mathematics Department, 117 Physics Bldg, Box
90320, Durham, NC 27708. *Cellular resolutions of monomial ideals and LCM lattices.*

In the study of cellular resolutions of monomial ideals it is often useful to consider the LCM lattice of the given monomial ideal. In particular, it is known that all ideals with isomorphic LCM lattices have isomorphic minimal resolutions. In this talk I will discuss how studying the parameter space of such lattices provides new insights into the structure of these resolutions. (Received August 26, 2009)