Laura Ghezzi* (lghezzi@citytech.cuny.edu). Reduction numbers and multiplicity of the Sally module.

We show how the reduction number of a primary ideal in a 2-dimensional Buchsbaum local ring can be bounded by the multiplicity of the Sally module and the Buchsbaum invariant of the ring. Our investigation led us to the study of several properties of the Sally module in general Noetherian rings. In ongoing work, we extend some of these properties to the Sally module of more general filtrations, with special focus on the normal filtration. This is joint work with S. Goto, J. Hong and W. Vasconcelos. (Received February 12, 2018)