Introduction to Uniformity in Commutative Algebra #2

Craig Huneke
University of Kansas

One of the critical themes in the field is that of reduction to characteristic p. We will discuss an old result of Zariski and Nagata concerning multiplicities which leads to the concept of symbolic powers, and we will give a characteristic p proof of their result. Uniformity plays an important role in the reduction process, as do various closure operations (which will be discussed in detail by Holger Brenner).