

1126-13-86

**Eloísa Grifo\***, [eloisa.grifo@virginia.edu](mailto:eloisa.grifo@virginia.edu), and **Craig Huneke**. *Symbolic powers of ideals defining  $F$ -pure rings*. Preliminary report.

Given a radical ideal  $I$  in a regular ring  $R$ , the containment problem of symbolic and ordinary powers of  $I$  consists of determining which symbolic powers of  $I$  are contained in each power of  $I$ . By work of Ein-Lazersfeld-Smith and Hochster-Huneke, there is a uniform answer to this question, but the containments it provides are not necessarily best possible.

In this talk, we will discuss the containment problem and present new results for the case when  $R/I$  is  $F$ -pure or when  $R/I$  is strongly  $F$ -regular; in particular, that a conjecture of Harbourne holds in the  $F$ -pure case. (Received January 05, 2017)