Kent Vashaw* (kvasha1@lsu.edu) and Milen Yakimov. *Prime spectra of triangulated 2-categories. *Preliminary report.

We describe a general theory of prime, completely prime, and semiprime ideals of triangulated 2-categories. These notions are a noncommutative analogue to Paul Balmer’s prime spectra of tensor-triangulated categories. We give an example of a computation of the prime spectrum of a derived 1-category of bimodules associated to a particular finite-dimensional algebra, using various tools from representation theory. (Received January 24, 2019)