1025-57-165 Qi Chen* (qichen@math.ohio-state.edu), Department of Mathematics, Ohio State University, Columbus, OH 43210. Some examples of integral TQFTs.

This is a joint work with Thomas Kerler.

We will show how to construct a class of TQFTs over Dedekind domains. TQFTs over Dedekind domains were first obtained by Gilmer based on the TQFTs constructed by Blanchet, Habegger, Masbaum and Vogel. Our construction is based on the TQFTs constructed by Kerler. We will also discuss some applications of these integral TQFTs. (Received January 22, 2007)