Jonathan Brundan* (brundan@uoregon.edu). Unfurling the Heisenberg category. Preliminary report.

There has been interest recently in various monoidal categories such as the Kac-Moody 2-categories of Khovanov, Lauda and Rouquier, and the Heisenberg categories of Khovanov, Licata, Savage and Mackaay. These categories are defined initially by generators and relations, but to work with them one also needs to know bases for their morphism spaces. I will explain Ben Webster’s approach to proving such basis theorems. My focus will be on the simplest example of Heisenberg category, but the method is quite general. (Received August 26, 2018)