

Categorifications from planar diagrammatics^{*}

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Abstract. A diagrammatic presentation of functors and natural transformations and the virtues of biadjointness are discussed. We then review a graphical description of the category of Soergel bimodules and a diagrammatic categorification of positive halves of quantum groups. These notes are a write-up of Takagi Lectures given by the author in Hokkaido University in June 2009.

Keywords and phrases: categorification, Soergel bimodules, quantum groups

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