## Refining Discrete Morse Functions

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#### 1 Introduction

[[XXX TODO: put some sort of high-level introduction here.]] here is how you cite a figure (be sure to updated the ref here ... and the label inside the figure

TO cite something, use [1].

### 2 Background

[[XXX TODO: discuss related work, and why you are qualified to work on this. Perhaps make subsections.]]

#### 3 Methods

## 4 Collaboration with Faculty Sponsor

[[XXX TODO: Does the following apply? Report on Previous Research Experience (please save and upload this as a separate document): If you have done any previous research as an undergraduate you must include a 1-2 page (double-spaced) summary of your research results or creative products.Please note-if you have received funding from USP or INBRE your proposal will not be considered unless you complete this section.]]

# References

[1] Fasy, B. T., Lecci, F., Rinaldo, A., Wasserman, L., Balakrishnan, S., and Singh, A. Confidence sets for persistence diagrams. *Annals of Statistics* 42, 6 (2014), 2301–39. Preprint available at ArXiv:1303.7117.