CELL DECOMPOSITION OF RANK 2 QUIVER GRASSMANNIANS

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ABSTRACT. We prove that all quiver Grassmannians for preprojective and preinjective respesentations of a generalized Kronecker quiver admit a cell decomposition. We also provide a natural combinatorial labeling for these cells using compatible pairs in a maximal Dyck path.

1. INTRODUCTION

-something about cluster algebras -something about categorification and quiver Grassmannians -something about compatible pairs and combinatorial construction of cluster variables -statement of our results -added abstract -acknowledgements?

-trying to a conflict

2. QUIVER REPRESENTATIONS

3. COMPATIBLE PAIRS