1108-81-476 Meg Walters and Shannon Starr* (slstarr@uab.edu). Eigenvector overlap functions in non-Hermitian random matrices.

We have considered eigenvector overlap functions for non-Hermitian random matrices. One may view this as a problem growing out of trying to apply mathematical methods from spin glasses to random matrix theory. In the complex Ginibre ensemble it is easy to calculate mixed matrix moments. But these involve eigenvector overlaps as well as the eigenvalue distributions. Physicists Chalker and Mehlig have considered this before. We discuss some of their results, some of our proofs of their conjectures, and other conjectures which remain open. Fyodorov and coauthors have shown that this also relates to resonances in quantum systems. We will also discuss this. (Received January 19, 2015)