Moshe Cohen* (mcohen@vassar.edu) and Elia Saini. Extending a result of Nazir and Yoshinaga to distinguish more interesting hyperplane arrangements. Preliminary report.

The moduli space of an arrangement is the space of all combinatorially equivalent arrangements; we are motivated by the topology of this space. When a line is added in a relatively trivial way to an arrangement whose moduli space has just one component, the resulting line arrangement also has a moduli space of just one component by a result of Nazir and Yoshinaga appearing in a paper on arrangements of eight lines. The first author used this to study arrangements of ten lines with more interesting moduli spaces.

We extend this result to hyperplane arrangements of higher dimension. (Received September 20, 2016)