

Cuntz, Michael
Computing configurations of lines

Some conjectures or open problems on hyperplane arrangements may be solved just by exhibiting an example or a counterexample. These can for instance be found by enumerations or other experiments with a computer. We have several tools at our disposal, the most promising method is possibly to exploit symmetry. Indeed, most relevant examples in the literature have a non-trivial symmetry group, maybe because symmetry allows us to find examples with a large number of lines, or because the most canonical and natural objects like for example the reflection arrangements are highly symmetric. In this talk, we present some types and examples of arrangements which I considered in my experiments. It turns out that sometimes, experiments are very likely to find everything, but some other times, there are so many non-symmetric examples that we need different approaches.