

## Oriented Semimatroids

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A toric arrangement is a finite family  $\mathcal{A}$  of special subtori of codimension one in the torus  $(\mathbb{C}^*)^n$  or  $(S^1)^n$ . Recent work of De Concini and Procesi generated new interest in combinatorial invariants of the topology of the complement of a toric arrangement.

Starting from the theory of semimatroids and oriented matroids, we want to develop *toric oriented matroids* as abstract characterisation of arrangements of topological subtori in the compact torus  $(S^1)^n$ , with a view towards generalising known topological results about the complement  $M(\mathcal{A}) = (S^1)^n - \cup \mathcal{A}$  using the toric Salvetti complex associated to the face categories of such *toric pseudoarrangements*.