Chern-Schwartz-MacPherson cycles of matroids

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I will introduce CSM cycles of an arbitrary matroid M, which are a special collection of balanced polyhedral fans associated to M. In the case the matroid M arises from a complex hyperplane arrangement $\mathcal{A}$, these cycles naturally represent the CSM class of the complement of $\mathcal{A}$. The CSM cycles of M generalize the tropical linear space of M to lower dimensions, and they satisfy very interesting combinatorics.

References

[1] Lucía López de Medrano, Felipe Rincón, and Kristin Shaw, *Chern-Schwartz-MacPherson cycles of matroids*, arXiv:1707.07303, preprint.