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INTERSECTIONS OF MATROIDS

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Edmonds discovered that combinatorial duality results can be formulated as facts about the intersection of two matroids. Just as finding a maximal matching in a graph is polynomial, and is NP-hard in general hypergraphs, so is the behavior of the intersection of more than two matroids more complex than that of the intersection of two matroids. But there is a useful tool: topology. I will tell about applications of topology to the subject.

Joint work with Eli Berger, He Guo, and Dani Kotlar.