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**Marcel Celaya, Georg Loho and Chi Ho Yuen\*** ([chi\\_ho\\_yuen@brown.edu](mailto:chi_ho_yuen@brown.edu)). *Oriented Matroids from Triangulations of Products of Simplices.*

We introduce a construction of oriented matroids from a triangulation of a product of two simplices. For this, we use the structure of such a triangulation in terms of polyhedral matching fields. The oriented matroid is composed of compatible chirotopes on the cells in a matroid subdivision of the hypersimplex, which might be of independent interest. We also derive a topological representation of the oriented matroid using a variant of Viro's patchworking. If time permits, we will mention the extension to matroids over hyperfields and potential applications in complexity theory. (Received July 21, 2020)