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The role of geometry in 4-vertex origami mechanics SCOTT WAITUKAITIS, PETER DIELEMAN, MARTIN VAN HECKE, Leiden University, AMOLF — Origami offers an interesting design platform metamaterials because it strongly couples mechanics with geometry. Even so, most research carried out so far has been limited to one or two particular patterns. I will discuss the full geometrical space of the most common origami building block, the 4-vertex, and show how exotic geometries can have dramatic effects on the mechanics.

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