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Explorations with Sketchpad in topogeometry.

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Summary: This innovative snapshot uses Geometric Sketchpad to create a series of microworlds for representing and exploring standard topological surfaces such as the Torus, Klein bottle and Mobius strip. Using differing strategies of “wraparound”, these surfaces can be explored in their 2D flat representations. Using a dot on the leading edge of a sketchpad ray as the driver for the exploration, the authors call this domain “topogeometry”. Several interesting topogeometric questions are explored and visualized.

Classification: G90 U70 R20

Keywords: topological surfaces; geometry software

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