

Modular Multi-Branch Klein Bottles

Carlo H. Séquin (2016): 3D-printed modular assemblies, 7" and 10" tall, respectively.



Connected sum of 2 Klein bottles:
 $\sigma=1, g=4, b=2$



3 KB-mouths + 6 conn. 94.2°
 $\sigma=1, g=8, b=5$

Special pipe-junction models have been created on a 3D-printer in the form of Klein bottles with multiple punctures. These “KB-mouth” modules can be snapped together in many different configurations forming single-sided surfaces of high genus and with different symmetries.