

# Playing with (new) Definitions

inspired by Jeffrey Week's chapter 3 in *The Shape of Space* 2nd ed.

1. For each pair of manifolds determine if they have the same local geometries, local topologies, global geometries, or global topologies.

	2D Plane	Flat Torus	Donut Surface
2D Plane		same local geometry same local topology different global geometries different global topologies	
Flat Torus			
Donut Surface			