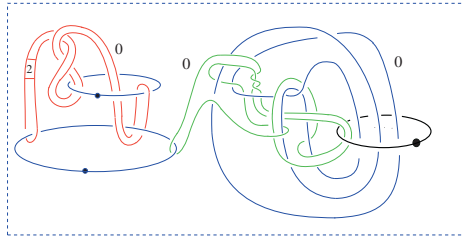
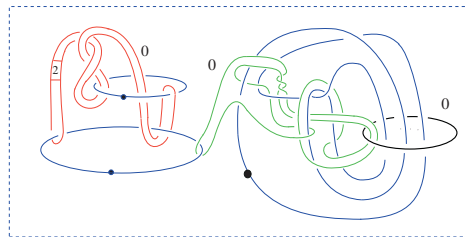


In this talk I will demonstrate homeomorphic but not diffeomorphic smooth compact contractible 4-manifolds with diffeomorphic boundaries. Previous examples of exotic structures on contractible manifolds (known as corks) were exotic relative to their boundaries, in the sense that a diffeomorphism of their boundaries do not extend to diffeomorphisms to the interior. This example is constructed by modifying a cork by adding an invertible homology cobordism along the boundary (This is a joint work with Daniel Ruberman).



X



Exotic X