

1024-54-144

Sandra L Shields* (shieldss@cofc.edu), 66 George Street, Charleston, SC 29462. *Modifying a branched surface to carry a foliation.*

The question of which flows on closed 3-manifolds admit transverse foliations is a subtle one with a long history. For a broad class of flows, we give an algorithm for modifying a branched surface that terminates in one carrying a foliation transverse to a given flow whenever such a foliation exists. As a corollary, we find branched surfaces that do not carry a foliations but that lift to ones that do. (Received January 06, 2007)