## David Gay

Title: Diffeomorphisms of  $S^4$  and loops of 2-spheres

**Abstract:** I will discuss ongoing joint work with David Gabai and Daniel Hartman relating isotopy classes of diffeomorphisms of  $S^4$  and loops of embeddings of 2-spheres into connected sums of  $S^2 \times S^2$ , and invariants in these two settings.