1003-55-1511   **Christina L Soderlund*** (`clsoderlund@yahoo.com`), UCLA Department of Mathematics, Box 951555, Los Angeles, CA 90095. *A Characterization of Fixed Point Sets in a Given Fiber-Homotopy Class.*

Let $f : E \to E$ be a self-map of a compact connected polyhedron. Given $\Phi \subset E$ a closed subset, Schirmer (Top. Appl. 37 (1990), 153-162) found necessary and sufficient conditions for the realization of Φ as the fixed point set of a map homotopic to f. We consider a fiber space $\mathcal{F} = (E, p, B)$ in which the fibration $p : E \to B$ is locally trivial and let $f : E \to E$ be a *fiber-preserving* map. We will show by example that Schirmer's results are insufficient for characterizing fixed point sets of maps *fiber*-homotopic to f. However with some modifications, we can extend Schirmer's techniques to obtain similar results for the fiber-preserving case. We will discuss these results. (Received October 05, 2004)