1023-55-1311 **Christina L Soderlund*** (csoderlu@callutheran.edu), 60 West Olsen Road #3750, Thousand Oaks, CA 91360, and **Robert F Brown** (rfb@math.ucla.edu), UCLA Dept of Mathematics, Los Angeles, CA 90095. *Fixed point bundles of fiber-preserving maps.* Preliminary report.

Let $f : E \to E$ be a self-map of a compact connected polyhedron. Given $A \subseteq E$ a closed subset, Schirmer (Top. Appl. 37 (1990), 153-162) found necessary and sufficient conditions for the realization of A as the fixed point set of a map homotopic to f. We consider Schirmer's problem in the setting of fiber-preserving maps of bundles. We will show by example that Schirmer's conditions are insufficient for characterizing fixed point sets of maps *fiber*-homotopic to a fiber-preserving map f. Given the bundle $\mathfrak{F} = (E, p, B; Y)$, we define a subset $A \subseteq E$ as a *bundle subset* of $\mathfrak{F}$ if for each component $p(A)_j$ of $p(A)$, the pair $(p^{-1}(p(A)_j), A_j)$, where $A_j = A \cap p^{-1}(p(A)_j)$, is a bundle pair with respect to the restriction bundle $\mathfrak{F}|p(A)_j$. For A a bundle subset of the fiber bundle, we present conditions that allow us to extend Schirmer's techniques in order to make A the fixed point set of a map that is fiber-homotopic to f. (Received September 25, 2006)