962-55-1244   **Miguel A Xicotencatl*** (`xico@math.cinvestav.mx`), Depto. de Matematicas del Cinvestav, Apdo. Postal 14-740, 07300 Mexico city, Mexico. *Orbit configuration spaces and G-equivariant loop spaces.*

Let G be a finite group, V a finite dimensional representation of G and X a well pointed G-space. We use orbit configuration spaces $F_G(M, k)$ to construct an equivariant model $C_V(X)$ for the G-space $\Omega^V \Sigma^V X = Map_*(S^V, X \wedge S^V)$. The space in question is a natural generalization of May's little cube model for $\Omega^n \Sigma^n X$. Moreover, the fix point set $C_V(X)^G$ has the homotopy type of the equivariant loop space $(\Omega^V \Sigma^V X)^G$. As an application, we recover Hauschild's product decomposition for $(\Omega^V \Sigma^V X)^G$. (Received October 03, 2000)