Jean-Baptiste Gatsinzi* (gatsinzjmopipi.ub.bw), Department of Mathematics, University of Botswana, Private Bag 0022, Gaborone, Botswana. On the genus of fibrations of fibre \( \prod K(Q, 2k_i) \).

**Definition.** The LS category of a space \( X \), \( \text{cat}(X) \), is the least integer \( n \) such that \( X \) can be covered by \( n + 1 \) open subsets, each contractible in \( X \).

Fibrations with fibre in the homotopy type of \( X \) are obtained as pull back of the universal fibration

\[
X \to B \text{aut}^\bullet X \to B \text{aut} X.
\]

If \( \text{aut}_1(X) \) denotes the path component of \( \text{aut} X \) containing the identity, the fibration \( X \to B \text{aut}^\bullet_1(X) \to B \text{aut}_1(X) \) is universal for fibrations with simply connected base spaces.

In this paper, we show the following

**Theorem.** If \( p \) is a fibration of fibre \( X = \prod_{i=1}^n K(Q, 2k_i) \), then the LS category of \( B \text{aut}_1(X) \) equals \( \dim \pi_*(B \text{aut}_1(X) \otimes Q) \). (Received August 14, 2004)