1093-57-55 Shijie Gu* (albertku123@163.com), 1605 N Virginia ST Apt 36, Reno, NV 89503. Shrinkability of Decomposition of S^n Having Arbitrarily Small Neighborhoods with (n-1)-sphere Frontiers.

Let G be a use decomposition of S^n , H_G denote the set of nondegenerate elements and π be the natural projection of S^n onto S^n/G . Suppose that each point in the decomposition space has arbitrarily small neighborhoods with (n-1)-sphere frontiers or boundaries which miss $\pi(H_G)$. If all the arcs are tame in the particular area, Bd $C - F_1 \cup h(F_2)$, on the boundary of an n-cell C in S^n , then this paper shows that this condition implies that S^n/G is homeomorphic to S^n $(n \ge 4)$. This answers a weak form of a conjecture asked by Daverman[1, p. 61]. In case n = 3, the strong form of the conjecture has an affirmative answer from Woodruff [2]. (Received August 21, 2013)