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RESEARCH ANNOUNCEMENTS

The purpose of this department is to provide early announcement of outstanding new results, with some indication of proof. Research announcements are limited to 100 typed lines of 65 spaces each. A limited number of research announcements may be communicated by each member of the Council who is also a member of a Society editorial committee. Manuscripts for research announcements should be sent directly to those Council members whose names are marked with asterisks on the inside back cover.

TOPOLOGICAL CONCORDANCES

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1. **Introduction.** In this announcement we outline a proof of Hudson's theorem, "Concordance implies isotopy in codimension 3" [3], for topological manifolds. This theorem is also proved by Armstrong [1] in case the ambient manifold is PL, using methods similar to those employed by Hudson. Our approach is to generalize the methods of Morlet [5] to the topological case, using PL approximating theorems locally. We have also generalized Morlet's results on the higher homotopy groups of concordance spaces to the topological case [6]. Detailed proofs will appear elsewhere [7]. I wish to thank Professor Lashof at the University of Chicago for many useful discussions and suggestions.

2. **Statement of results.** Let M and V be topological manifolds. By an embedding $\varphi: M \to V$ we understand a locally flat embedding such that $\varphi^{-1}(\partial V) = \partial M$ and φ meets the boundary regularly. We prove the following theorems:

THEOREM 1. *Let V^n be a topological manifold and M^q a compact topological handlebody. Let*

$$\phi: (M \times I, M \times 0, M \times 1) \to (V \times I, V \times 0, V \times 1)$$

be an embedding. Denote $\phi|M \times 0$ by g and assume

$$\varphi|\partial M \times I = (g|\partial M) \times 1_I$$

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