

Re: Homotopic maps

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- *From:* "ptk" <pkornman@xxxxxxx>
 - *Date:* Tue, 22 Nov 2005 20:30:08 +0000 (UTC)
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If $n \geq 3$, let $g: S^n \rightarrow S^n$ be the map $g(x_1, \dots, x_n, x_{n+1}) = (x_1, \dots, x_n, |x_{n+1}|)$. Notice that $\text{im } g$ lies in the closed upper hemisphere H of S^n which is a disk D^n . Let $h: H \rightarrow S^n$ be the map that takes $\text{Bd } D^n$ to the southpole and maps $\text{int } D^n$ onto $S^n - \{\text{south pole}\}$. Let $f(x) = h(g(x)): S^n \rightarrow S^n$. Since f factors through a disk it's inessential. That is, f is an inessential map of S^n onto S^n .

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 - ◇ *From:* ptk
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 - ◇ *From:* Maury Barbato
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