MA 229/MA 235 - Lecture 13

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Recap

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- Define ψ(u, v) = (u, v S(u)) so that the second half is 0 iff v = S(u). Thus if ψ is a valid local change of coordinates, then F̂(y) = (y, 0). ψ has an explicit inverse and is a diffeo (why?)

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- If M is a manifold (without boundary) and S ⊂ M, then S is said to be a local k-slice near p if there exists a chart (φ, U) near p so that S ∩ U is a k-slice in this chart. (By the way, we can always make sure that the constants are 0 by subtraction.)

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