Updates to

Olver, P.J., Geometric foundations of numerical algorithms and symmetry, *Appl. Alg. Engin. Commun. Comput.* **11** (2001), 417–436.

Last posted: December 20, 2020.

Lemma 3.6 is, in fact, a nontrivial theorem due to Boman, J., Differentiability of a function and of its compositions with functions of one variable, *Math. Scand.* **20** (1967), 249–268. Interestingly, while this result is true for C^{∞} functions, it is false for C^n functions when $1 \leq n < \infty$.

There is still no construction of a suitable multispace for higher dimensional submanifolds, which remains a significant open problem.