

ABSTRACT. Mather defined the nice dimensions, that is, the pairs (n, p) for which the set of proper smooth stable mappings between smooth manifolds N^n and P^p is dense in the space of all such mappings. In this talk I will define the extra-nice dimensions, that is, the pairs (n, p) for which all stable germs in $(n + 1, p + 1)$ have a hyperplane section of codimension 1. I will show that in the nice dimensions all codimension 1 germs are simple and in the extra-nice dimensions all codimension 2 germs are simple. It is a joint work with M. Ruas and R. Oset-Sinha.