

# Kolloquium

Institut für Mathematik

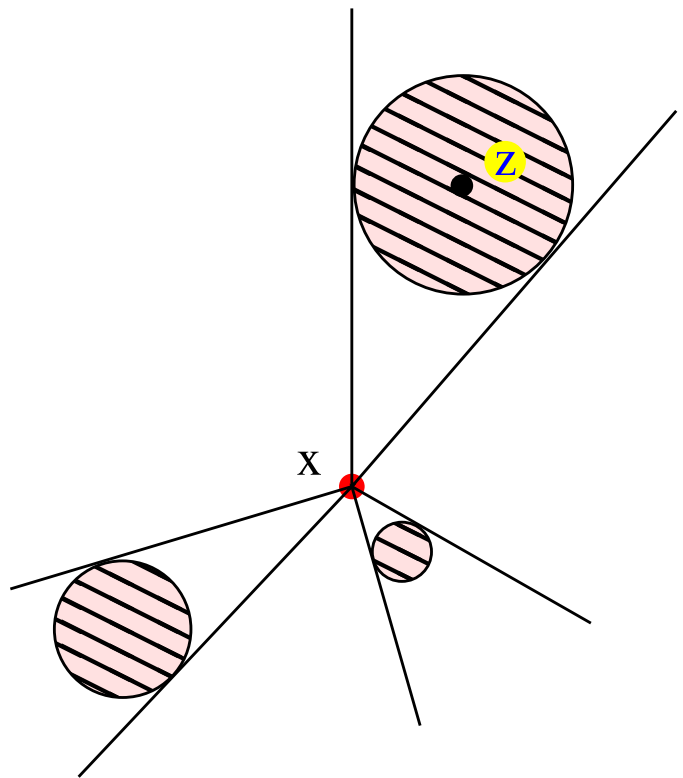
Universität Innsbruck

Olga Maleva, University of Birmingham

## *Lowest fractal dimensions for universal differentiability*

In a given space  $X$ , we are looking for as small as possible universal differentiability sets (UDS)  $S$ , defined by the requirement that every Lipschitz function on  $X$  has a point of differentiability in  $S$ . We show that Euclidean spaces contain fractal universal differentiability sets of Minkowski dimension 1. This is the lowest possible as all projections of the set of differentiability points inside UDS have positive measure. We discuss whether power function in the definition of Minkowski dimension may be replaced with a finer gauge function.

This is joint work with M.Dymond.



Do · 23 · Okt

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