

1110-35-292

Luigi Fontana* (luigi.fontana@unimib.it) and **Carlo Morpurgo**. *Adams and Moser-Trudinger inequalities on spaces of infinite measure. Part II.*

We present several sharp Moser-Trudinger inequalities for the critical Sobolev space $W^{k,n/k}$ on \mathbb{R}^n and on the hyperbolic space \mathbb{H}^n . Up to now, results are only known for $k = 1$, both on \mathbb{R}^n and \mathbb{H}^n , and for $k = 2$ on \mathbb{R}^4 .

These new results are obtained as applications of the Adams inequalities described in Part I. (Received February 23, 2015)