1110-35-291	**Luigi Fontana** and **Carlo Morpurgo*** (`morpurgoc@missouri.edu`). *Adams and Moser-Trudinger inequalities on spaces of infinite measure. Part I.*

We first present a sharp Adams inequality for the Riesz potential $|x|^{\alpha-n} * f$ ($0 < \alpha < n$), for functions f with arbitrary compact support on $\mathbb{R}^n$. The same result also holds for more general convolution kernels, which are homogeneous of order $\alpha - n$. Up to now such results were only known for a class of f whose supports have uniformly bounded measure.

Next, we present sharp Adams inequalities for general integral operators on spaces of arbitrary measure, whose integral kernel satisfies suitable growth and decay conditions. These results extend the ones obtained earlier by the authors, in the context of finite measure spaces. (Received February 23, 2015)