

$$\begin{aligned}
& \operatorname{div} \nabla f \exists g \forall a \in \operatorname{Dom} f_0 (g(a) = \{g(x) \mid x \in f(a)\}) \\
& \sum_{h,k} \frac{\sqrt{1 + |\partial u|^2}}{\partial x_h} \partial u \partial x_k \Gamma \lim_{h \rightarrow \infty} |Du|_{\mathcal{F}^* E} = 0 \\
& \forall f \exists g \forall a \in \operatorname{Dom} f (g(a) = \{g(x) \mid x \in f(a) \cap A\} \cup (f(a) \setminus A))
\end{aligned}$$

Colloquio De Giorgi

7 February
2024
4:30 pm

Aula Dini
Palazzo del Castelletto
via del Castelletto
Pisa

MARK POLLICOTT

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***Estimating characteristic values in Dynamics,
Diophantine Approximation and Geometry***

Abstract: On some occasions it may be particularly useful to have precise estimates on certain numerical values. We will consider two examples. Firstly the dimension of Cantor sets in the unit interval (which quantify the size of such sets) and secondly Lyapunov exponents for matrices (which quantify the growth in the size of random products of matrices). The aim of this talk is to give a method which allows us to obtain bounds on these numerical values which are completely rigorous. Part of the motivation for this problem is through the applications, for example to problems in geometry (such as barycentric subdivision of Euclidean triangles) and number theory (such as the density one version of the Zaremba conjecture).

No previous knowledge will be assumed.

Web site: <http://www.crm.sns.it/event/526/>

The event will take place in person.

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