



Mês de: Julho 2010

SEMINÁRIO DE LÓGICA MATEMÁTICA

Dia 1 de Junho (quinta-feira), às 18h, na Sala 3-10

“Definable linear orders definably embed in lexicographic orders in o-minimal structures”

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Abstract:

We completely characterize all definable linear orders in o-minimal groups. Let M be an o-minimal structure expanding a group. Let $(P, <_p)$ be any definable linear order in M . Then $(P, <_p)$ embeds definably in $(M^{\{2n+1\}}, <_l)$, where $<_l$ is the lexicographic order and n is the o-minimal dimension of P . This improves a result of A. Onshuus and C. Steinhorn in the case that M has a definable order-reversing bijection. The dimension of the target space can be taken to be $n+1$ if M expands a field. We will also discuss connections between this topic and preference relations in economics.

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