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SEMINARIO DE GEOMETRÍA ALGEBRAICA

Miércoles 7 de mayo de 2008, 13:00, Seminario 238

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Univ. de Liverpool

Impartirá la conferencia

Finiteness of the number of arithmetic hyperbolic reflection groups

Summary: In 1980 - 1981, I had shown that the number of maximal arithmetic hyperbolic reflection groups is finite in each dimension $n \geq 10$. In 1981, Vinberg had shown that these groups don't exist in dimensions $n \geq 30$.

Almost 25 years there were no further general results in this domain. In 2005, Long, Maclachlan, Read showed finiteness in dimension $n = 2$, and Agol showed finiteness in dimension $n = 3$.

In 2006, I showed finiteness in all remaining dimensions $4 \leq n \leq 9$. Thus, now we know finiteness of the number of maximal arithmetic hyperbolic reflection groups in all dimensions together.

In my talk, I hope to outline these results.