

Logic Seminar

The model theoretic universe

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Abstract: In recent years, Boris Zilber has begun a project to establish a duality between coordinate algebras and geometric structures built from Zariski geometries. The most fully worked out part of this project revolves around Heisenberg-Weyl algebras and the canonical commutation relation. In joint work with Martin Bays, we have taken Zilber's approach and applied it to one of the natural structures of mathematical physics, the space of tempered distributions, in order to show that this space is pseudo-finite and that the canonical commutation relation holds from a model theoretic point of view. Along the way, we make some remarks about cats (Schroedinger and otherwise).

Thursday, October 8 at 4:00 PM in SEO 427