

**APPLICATIONS OF ULTRAPRODUCT  
CONSTRUCTIONS IN MODEL THEORY OF METRIC  
SPACES**

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I will discuss importance of nonstandard (saturated) extensions in model theory, while putting emphasis on one specific way to obtain such extensions: ultraproduct constructions. I will mention applications of ultraproducts in different areas of mathematics and concentrate on joint work with Ben-Yaacov (based on Chang and Keisler's results from 1966) recently expanded by Henson, Berenstein and others, suggesting a new foundation for model theory of metric spaces.

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