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Finding the main gap in the generalised descriptive set theory

Shelah's main gap theorem gives us a notion of complexity, a theory is more complex when this one has more non-isomorphic models. In generalised descriptive set theory (GDST) the complexity of a theory is given by the complexity of the isomorphism relation. One of the most important questions in GDST is whether the complexity notion from GDST is a refinement of the model theory complexity notion. In this talk we will review the progress made in this question. We will see how Shelah's division lines (classifiable shallow, classifiable, unstable, stable unsuperstable, superstable with DOP, superstable with DOP) are related to different notions in GDST such as Borel set, analytical co-analytical sets, Borel* sets, complete analytical sets, Borel reducibility.