Research Statement

Giorgio Audrito

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Definability and forcing extensions:

- Laver's Theorem and definability (with parameters in M) of a set-generic restriction M of V.

- Bukovsky's Theorem and characterization of V being a κ-cc (risp. size at most κ) generic extension of M.

- First-order formulations of the above two properties and Ground Axiom.

Approximation properties and consequences:

- κ-approximation in $H(\kappa)$.

- Properties of κ-approximated sets.

- Closure $\overline{M}^{\kappa}$ of a model M by κ-approximation.