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A model theoretical approach to sparsity

The notion of sparse graphs, although vague, usually witnesses a qualitative leap in structural properties. It appears that this structural differentiation agrees with the main dividing lines of model theory: stability and dependence. We survey some mutual enrichments of structural graph theory and model theory and show how model theory provides interesting tools to handle sparse graphs and suggests intriguing problems, whose significance encompasses both graph theory, theoretical computer science, and model theory.