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Asymptotic analysis of walks with small steps in the quarter plane.

The enumeration of walks in the quarter plane is an elegant problem. Much work has been done attempting to classify walks with small steps. At the coarsest level there are two families; asymptotic estimates for one family are known but not proved, and non-holonomy of the generating functions for walks in the other family is conjectured. Proving these conjectures is a priority: we survey recent results while outlining a strategy for achieving a rigorous classification.