

# Logics for Dynamical Systems

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In view of Gödel's incompleteness theorems and the undecidability of first-order logic, the standard foundational systems of mathematics are typically not suitable for automated deduction. To avoid this issue, one can instead consider proof systems for specific applications tailored to enjoy better computational behaviour. In this talk we will consider several logical frameworks capable of reasoning about asymptotic properties of dynamical systems, including a system based on so-called temporal logic that has recently been shown to be decidable.