UPO UNIVERSITÁ DEL PIEMONTE ORIENTALE
DIPARTIMENTO DI SCIENZE E INNOVAZIONE TECNOLOGICA

EVENTI DiSIT

Seminario | Seminar
06-11-2023
14:30-15:30
Sala Seminari Informatica - C192
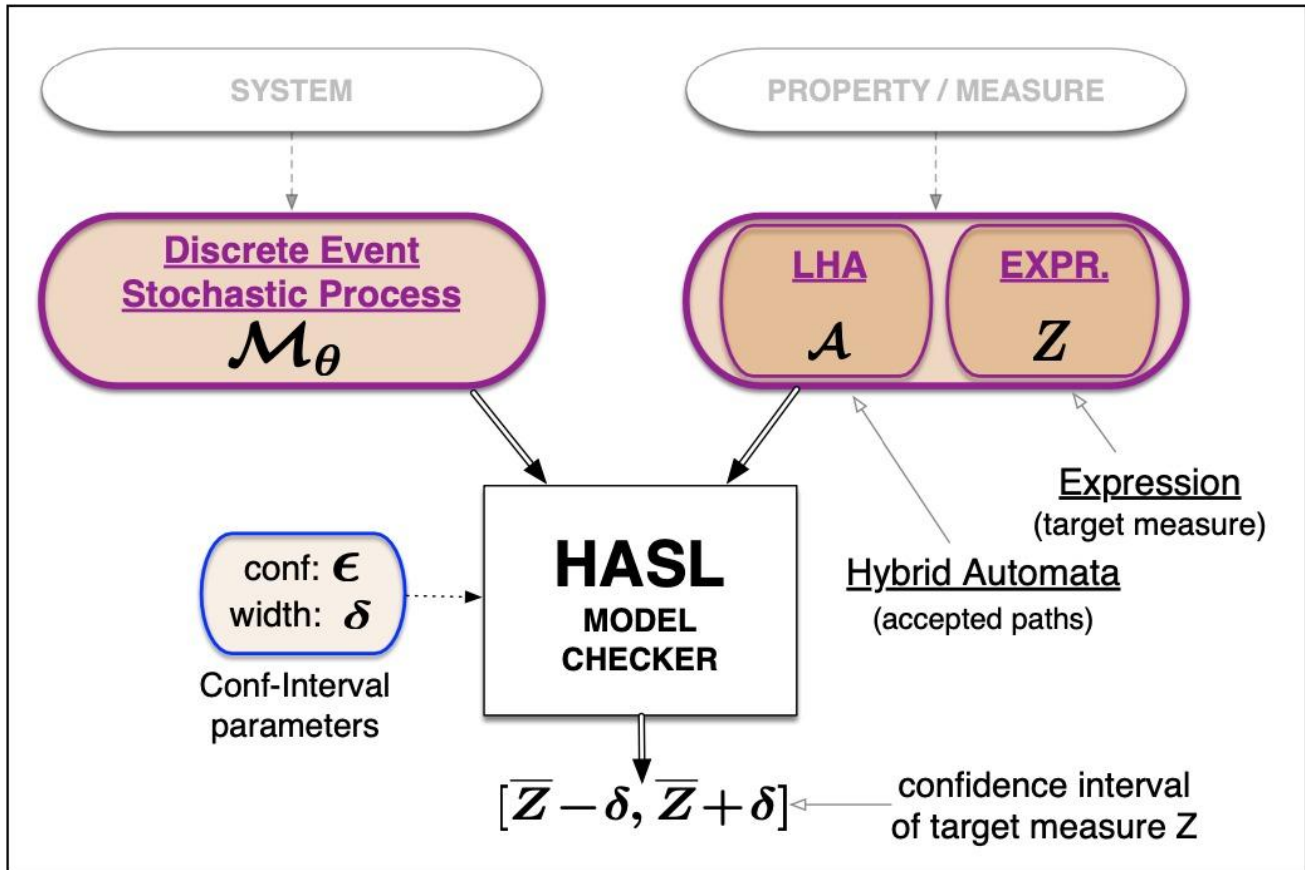
Hybrid automata as formal properties specifications

Prof. Paolo Ballarini

Ecole CentraleSupélec, Université Paris Saclay

Hybrid Automata Stochastic Model Checking

Probabilistic model checking is concerned with providing modelers with an effective means for automatically assessing the probability for a stochastic model to exhibit a given behavior formally expressed by a temporal logic formula. The ability to capture relevant behaviors depends on the expressiveness of the considered property language and in this respect the Hybrid Automata Specifications Language (HASL) has proved a powerful means which exceeds the expressiveness of classical temporal logics. In this talk I am going to overview the Hybrid Automata Stochastic Logic (HASL) model checking approach by which a performance indicator is expressed via a hybrid automata and its mean value is approximated by means of a dedicated cross-product stochastic simulation engine where the trajectories of the model are synchronized with the automaton. I will present a few applications in different fields including systems biology and manufacturing systems.

EVENTO APERTO A:
Docenti | Teachers, Borsisti | Research Fellows, Assegnisti | Postdoctoral researcher, Dottorandi | PhD students

SEMINARIO IN LINGUA: Italiano se i partecipanti saranno tutti italiani, altrimenti Inglese