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Sommario/riassunto

Traditionally, models and methods for the analysis of the functional correctness of reactive systems, and those for the analysis of their performance (and - pendability) aspects, have been studied by di?erent research communities. This has resulted in the development of successful, but distinct and largely unrelated modeling and analysis techniques for both domains. In many modern systems, however, the di?erence between their functional features and their performance properties has become blurred, as relevant functionalities become inextricably linked to performance aspects, e.g. isochronous data transfer for live video tra- mission. During the last decade, this trend has motivated an increased interest in c- bining insights and results from the ?eld of formal methods – traditionally - cused on functionality – with techniques for performance modeling and analysis. Prominent examples of this cross-fertilization are extensions of process algebra and Petri nets that allow for the automatic generation of performance models, the use of formal proof techniques to assess the correctness of randomized - gorithms, and extensions of model checking techniques to analyze performance requirements automatically. We believe that these developments markthe - ginning of a new paradigm for the modeling and analysis of systems in which qualitative and quantitative aspects are studied from an integrated perspective. We are convinced that the further worktowards the realization of this goal will be a growing source of inspiration and progress for both communities.