

**Speakers:** Narciso Martí Oliet and Rubén Rubio

**Title:** Strategies, qualitative and quantitative model checking in Maude

**Abstract:** Concurrency is naturally modeled in rewriting logic – and in its Maude implementation – via the inherent nondeterminism of rewrite rule application within a term. However, it is sometimes desirable to limit this nondeterminism in order to capture additional restrictions or direct the model behavior. Strategies are a classical and useful resource for this purpose, and so Maude counts with a built-in strategy language. Moreover, strategies can also be used to quantify rather than eliminate the nondeterminism, hence allowing for probabilistic and statistical analyses of specifications. This talk gives an overview of the support for strategies in Maude and the qualitative and quantitative model-checking features connected to them.