

[Model Checking](#) has been mentioned at several occasions in meetings, slack conversations, and forum posts. It is a method that often promises fully automatic verification of systems, i.e., that a system has all the desired properties. Although the “fully automatic” in that sentence is usually a bit of a stretch, model checking is known for catching errors. For sure, you can play with it!

I would even go as far and say that it is easier to play around with than any of Coq, Agda, Lean, etc., but maybe dependent types and programming in Lean is your cup of tea.

Now and here, I just bluntly claim that we all need to speak the specification languages of model checking

, i.e., the languages that are used to describe system properties, in particular [LTL](#), [CTL](#), and in particular understand the general notion of liveness and safety properties. There's a “the

book” on the topic: [Principles of Model Checking - Wikipedia](#)

Roughly, I propose that we go through these courses:

- [Model Checking | Informatik 2](#)
- [Modelling and Verification of Probabilistic Systems | Informatik 2](#)

However, any thoughts are welcome.