Course Announcement

**Formal Methods**  
(Core Computer Science)  
*Second term fall, November 25, 2013 – January 31, 2014*

**Instructor(s):** Krishnendu Chatterjee, Thomas Henzinger  
**Teaching Assistant(s):** Andreas Pavlogiannis, Thorsten Tarrach

**Course Description:**
We present formal modeling languages and analysis tools for discrete-event dynamical systems, with special emphasis on applications from computer science and biology. The languages we discuss are based on mathematical logic, rewrite rules, automata, circuits, and programming constructs. The analysis methods include model checking, theorem proving, and abstract interpretation. We give brief introductions to advanced models incorporating time, probabilities, game-theoretic aspects, and continuous behavior.

**Course Requirements and Exams:**
Lectures and recitations, weekly homework, 75-min exam at the end of the half-term

**Course schedule:**
2 weekly 75min lectures Tuesdays and Thursdays, 1:00-2:15PM, recitations Thursdays, 2:30-3:20PM

**Course Academic Credits:**
3 ECTS

**Course Website:** [http://pub.ist.ac.at/courses/AY1314/FormalMethods_F13/](http://pub.ist.ac.at/courses/AY1314/FormalMethods_F13/)

*This course starts on Tuesday, November 26, 2013 (1:00-2:15PM)*

Seminar Room Mondi 3, IST Austria Central Building, 1st floor

The registration deadline for this course is **Monday, November 18, 2013** via IST Austria’s online registration tool: [http://ist.ac.at/graduate-school/courses/registration/](http://ist.ac.at/graduate-school/courses/registration/).

This announcement is valid as a ticket for the IST Shuttle bus (#242) from and to Heiligenstadt Metro Station. Please find a schedule of the IST Shuttle on our webpage (note that the IST Shuttle times are marked in dark green): [https://ist.ac.at/fileadmin/user_upload/pdfs/IST_shuttle_bus.pdf](https://ist.ac.at/fileadmin/user_upload/pdfs/IST_shuttle_bus.pdf). The IST Shuttle bus is marked “IST Shuttle” and has the Institute logo printed on the side.