# SEMINAIRE LASQUO & LISA

**Lundi 19 septembre à 11h00**
**Salle 411 (ISTIA)**

**Max QUEIROZ (Université fédérale de Santa-Catarina)**

**Résumé:**

This paper presents a model-driven engineering approach to model and verify PLC programs written in Ladder Diagram. PLC and plant are modeled in FIACRE language according to transformation models. A verification toolchain is built around FIACRE, in order to guarantee the satisfaction of generic and application-oriented properties. The potential of this approach and associated toolchain is tested on a PLC controlled pneumatic system. Transformation from Ladder Diagram to FIACRE models is described in details and verification of PLC alone or linked with a plant is discussed in the application context.

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