

# Program Transformation and Verification are Interrelated

(Invited Talk)

David Monniaux

VERIMAG  
CNRS - University of Grenoble  
France

David.Monniaux@imag.fr

In this talk, we shall see examples of

- How certain transformations are enabled only when certain conditions established by program analysis are met. For instance, certain tests may be removed if some conditions are never met; some transformations are possible only if program fragments are shown to be terminating.
- How certain program analyses can be expressed by program transformations (e.g. SSA, linearization...). Here, the program is rewritten so as to make analysis easier.

The talk will be illustrated by tools and algorithms developed within the STATOR and VERASCO projects.