# Séminaire n°30 du Jeudi 08 Octobre 2015, 10h, TGCC.
# <u>Keep Calm and Verify your Software: an Overview of the Frama-C Platform</u>

Jeudi 08 Octobre 2015, Florent Kirchner, Ingénieur-Chercheur au CEA, nous présentera la plateforme Frama-C, permettant une analyse modulaire de code source C.

Voici le résumé de cette présentation qui aura lieu au TGCC à 10h.

### Keep Calm and Verify your Software: an Overview of the Frama-C Platform

Whether software is embedded into a critical system or used off-the-shelf by millions of users, it is having to meet an increasingly difficult requirement: the need to guarantee its pivotal properties under a wide variety of operational conditions. Can the code produce unspecified behaviors ? Does it contain a given kind of security vulnerability ? Does it isolate its components from one another ? Does it meet its functional specifications ?

Frama-C is an open-source platform for the modular analysis of C source code. Its design allows users and developers to perform complementary verifications, providing guarantees about its behavior through static and dynamic analyses. By means of an open and modular architecture, it enables the development of new plug-ins by a growing community of both academic and industrial users. In this talk we will review some of the main features of the Frama-C platform, show how it can be successfully applied to (open-source) software projects, and illustrate its role in various collaborations and shared innovation contexts.

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**Florent Kirchner** leads the Software Security Laboratory at CEA LIST. He received his Ph.D. in Computer Science from Ecole Polytechnique in 2007. He is an expert scientist at CEA LIST, and he has developed and applied several approaches to software verification, both as part of academic and industrial projects. He was active in launching and heading collaborative efforts with a wide variety of international partners, including the FP7 project STANCE and cross-Atlantic collaborations with NASA, SRI International and the University of Santa Cruz. As a Head of Laboratory he is responsible for a group of 40 scientists working on the research and development of next-generation software analysis technologies, and the associated dissemination and communication activities.