DEPARTMENT OF MATHEMATICS AND COMPUTER SCIENCE
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Software Design by Calculation in the CAMILA Toolset

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The Seminar Room

Abstract: One of the aims of the CAMILA Toolset is to bring theory and practice together in the area of formal methods for software design.

On the theory side, the toolset "animates" a notation and calculus (SETS) which is rooted on (a modest use of) category theory. The SETS calculus enables program derivation by calculation in a relatively simple and attractive style.

On the practical side, and further to the animation of formal models in the IFAD Toolbox tradition, the toolset integrates SETS calculation into model animation so that users can check the behaviour of specifications and implementations in a concurrent style.

The talk will concentrate on the overall CAMILA software development life-cycle and on the SETS-based calculation style. A prospect will be given of the application of this technology to large-scale reverse engineering in a 'legacy system' context.

Søren Larsen