## **Coupled Problem Solutions**

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The nanoCOPS project (2013-2016) was devoted to Coupled Problem Solutions. Here couplings between Electromagnetics, Electronic Circuits, Temperature and Mechanical Stress were considered. It has led to separate studies in bondwire modelling & simulation & measurements, to techniques like multirate time integration, reduced order modelling, uncertainty quantification, fast fault simulation as well as to reliability and ageing. It was a typical project involving mathematics as key technology in close interaction with the physics in electronics and with approaches developed by computer science. Academia and engineers were in close interaction during all phases. The new algorithms enhanced ways of simulation, but also had to fit implementation environments. In this way the project provided new techniques to the industrial partners, they being end users and provider of simulation tools. A thorough validation successfully demonstrated the achievements. The talk will summarize several highlights. One or two aspects will be described in more details.

## References

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