

## WCPM/CSC joint seminar

# What is good research software, how can it be engineered, and is it deliverable within the constraints of academic projects?

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Monday, 30th January, 1 p.m.

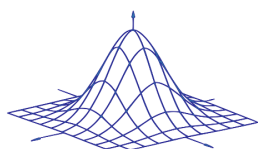
D2.02 Seminar room, Engineering

**Abstract:** Researchers increasingly need to develop software to solve challenges encountered during their work. However, they are rarely provided with training in programming, software design or software engineering. The code they write, while solving their problem, can be difficult to use, sustain and scale up to production use by other researchers or by industry. To solve this problem, universities and research funders are beginning to develop roles for a new type of academic; the Research Software Engineer (RSE). RSEs have strong backgrounds in research, together with a deep knowledge of current software engineering best practice.

In this talk, I will discuss the role of the Research Software Engineer, and will show an efficient way to write good quality research software. I will present software engineering best practice, and how it can be applied at different stages of research software development. Finally, I will present a case study of the molecular simulation framework Sire (<http://siremol.org>), which showcases how good software design and engineering can be deliverable within the time and resource constraints of academic research.

A buffet lunch is available from 12:45 pm.

More info: <http://warwick.ac.uk/wcpm/seminars>



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