

Nicolas Gruel

Research software Engineer Manchester University

Background

Astrophysicist (Theory)

Observational Astrophysicist (Observer)

Instrumentation (Data acquisition)

Pipeline (Data reduction, data management, Software development)

In Silico Medecine (Software Development)

Theory Code

Something missing?

Theory Code Experimentations Observations

In Silico Medecine

Experimentations/Tests are often very costly

Their solution? Going fully numerical

Problems:

How to validate the models?

Nature has a tendency to be too complex!

Quality of the code and development method

RSE can at least improve the code and produce better code.

- Control version system (Git)
- Documentation
- Quality assurance
- Maintenance (Bug reports)