

- **Design**

What data should be collected in order to answer a scientific question?

- **Modelling**

How can the variation in the data be described mathematically, so that the description:

- is not demonstrably inconsistent with the data
- incorporates the underlying science, to the extent that this is well understood
- is as simple as possible subject to the above two constraints

- **Inference**

Given the data and the model, what scientific conclusions can be drawn?