Charlie meeting 20th June

Meeting

In this meeting, Andrew and I discussed the result I produced last week. Everything is working, which is good. This week I will work on different type of paramtisation to paramatise the energy function, Andrew suggested a few different methods as basis functions, such as polynomial, splines and Fourier representation. We also talked about my methods of adding jitter, which might not be entire reasonable so I am fixing that too. He also talked about a way that makes this methods scalable, which is that instead of a grid of invariance, we only condition on the local area around the data points as well as the test points we wish to evaluate. If noise too small or too much data, it's not good for nonlinear nor damping. But in most reasonable cases, 30 seconds with 30 points with noise 0.1 the kernel all worked well. We have four scenarios to check.

- 1. lots of data, noisy
- 2. little data, noisy
- 3. lots of data, not noisy
- 4. little, not noisy