





# Inferring dynamical 2D maps

**Concept.** The idea here is... For the mathematically-inclined, this chapter will... For the programmers, the software described in this chapter lives in the public Git repository: <https://github.com/umbralcalc/learnadex>.

## 6.1 Adapting the probabilistic formalism

The extra detail that's needed here is to consider how we encode a 2d spatial process into our state vector, and how the elements of the resulting state vector might be correlated to one another depending on their spatial proximity. If we start with a Markovian Gaussian random field, we can derive the Matérn kernel over these spatial coordinates in order to correlate the state vectors in such a way.



# Bibliography