

Convergence rates of deep Gaussian process regression

Aretha Teckentrup, University of Edinburgh

Deep Gaussian processes have proved remarkably successful as a tool for various statistical inference and machine learning tasks. This success relates in part to the flexibility of these processes and their ability to capture complex, non-stationary behaviours. In this talk, we will introduce the general framework of deep Gaussian processes, and consider their use as prior distributions in regression and interpolation tasks. We present novel results on the convergence of the methodology as the number of data points goes to infinity.