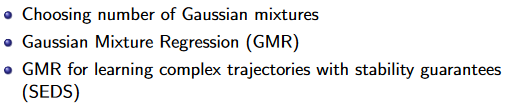
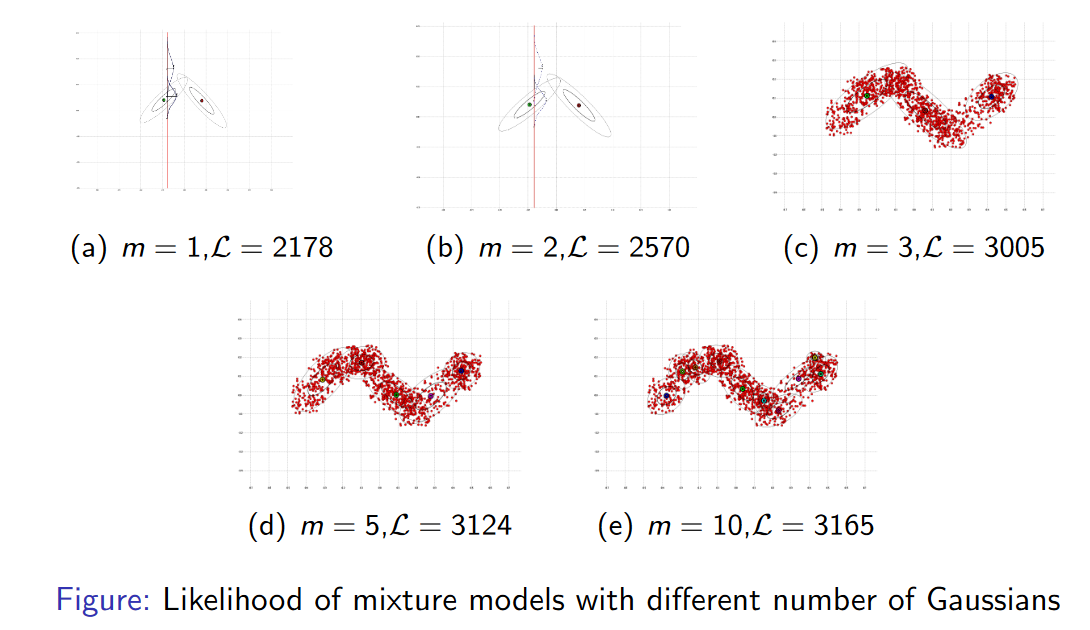
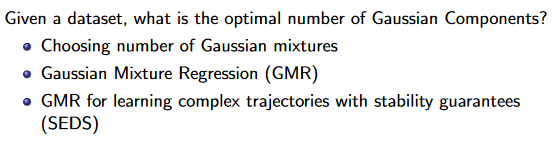
Week 10 Advanced Robotics - Gaussian Mixture Regression  
and Stable Estimator of Dynamical Systems

Athanasios Polydoros May 8, 2022

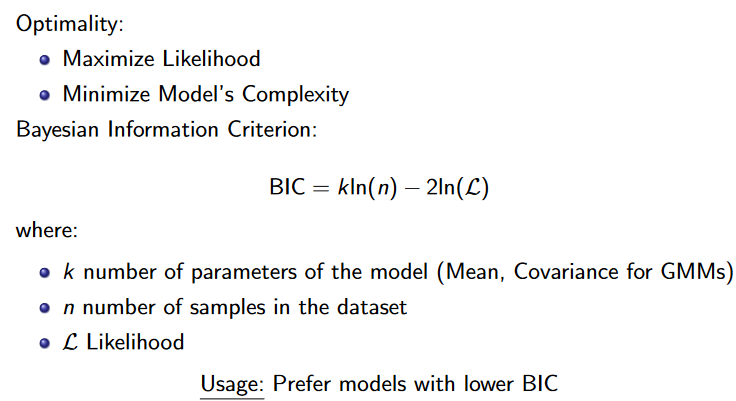
Today’s topics



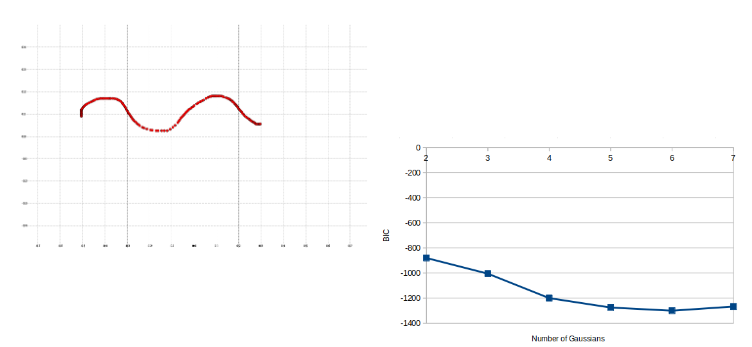
Optimal number of Gauissian

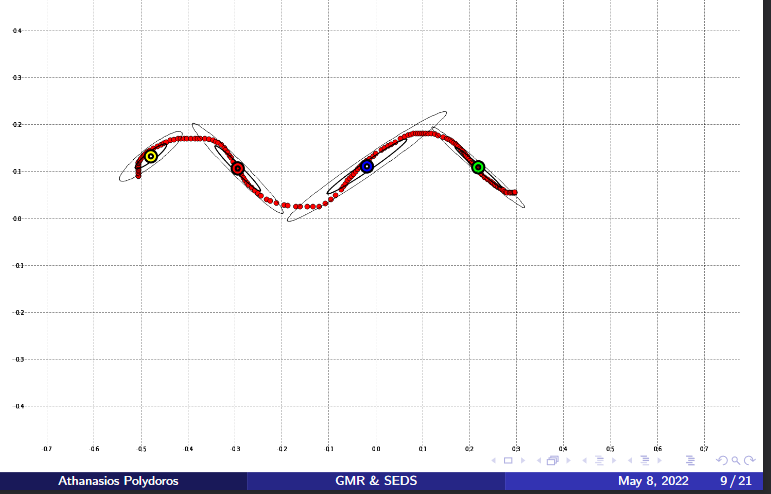


How to choose the optimal number of Gaussians?

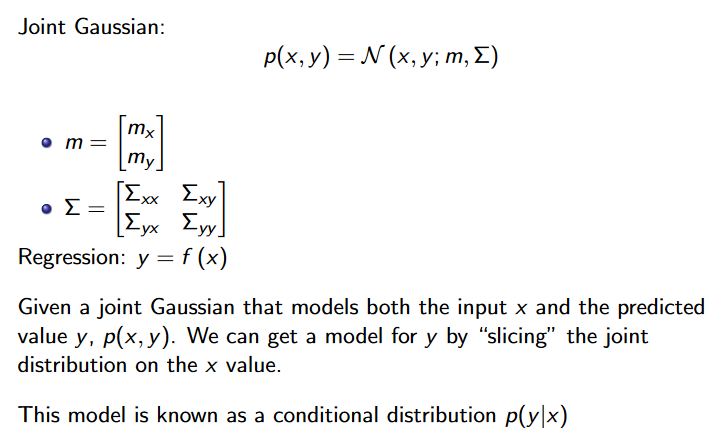


**Using BIC**

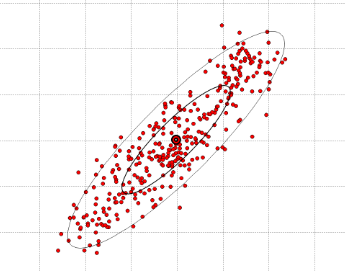


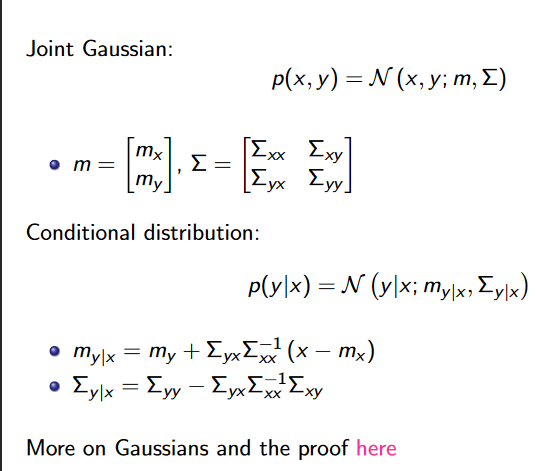
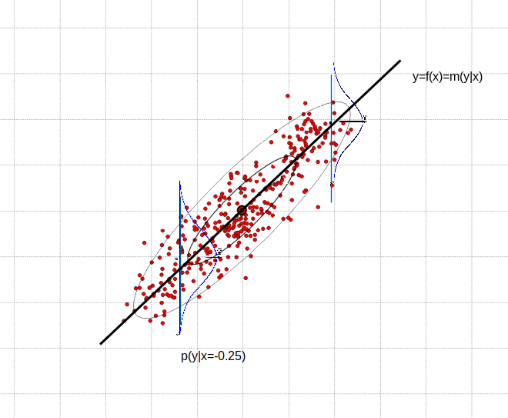
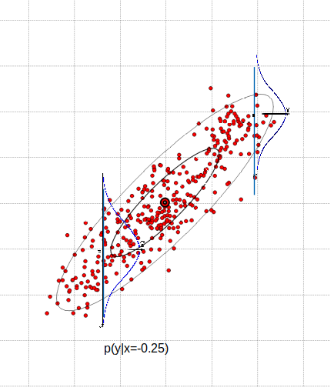
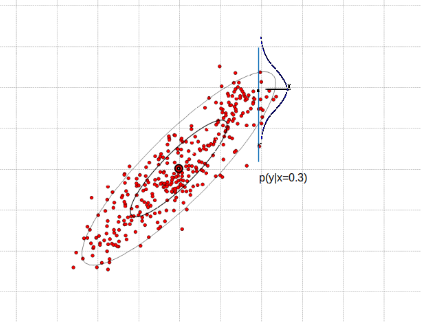
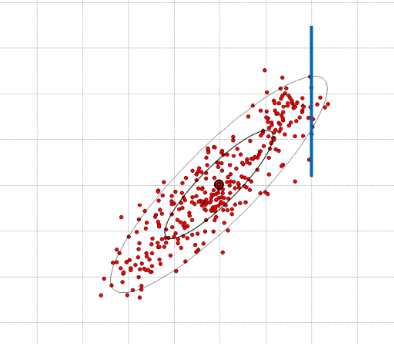


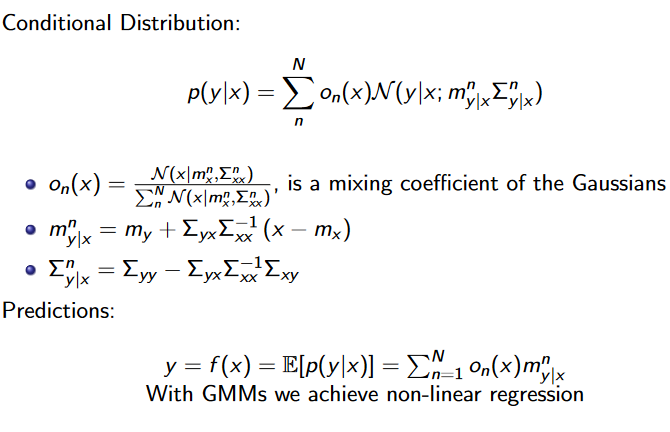
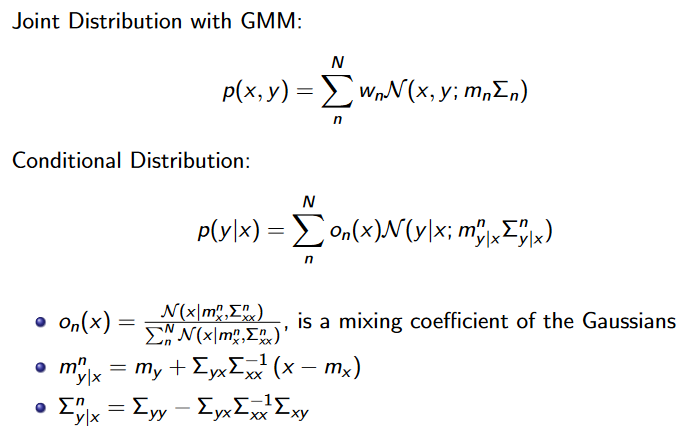
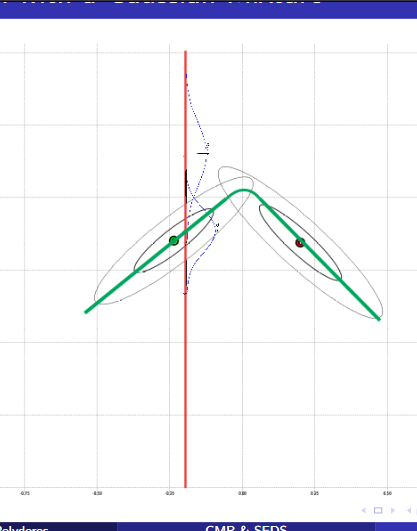
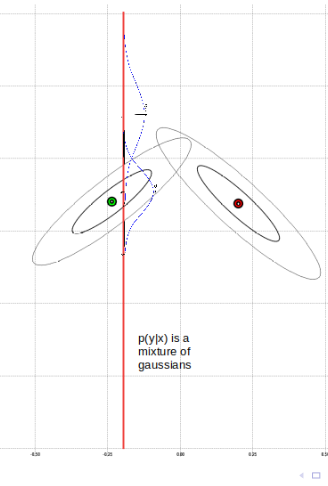
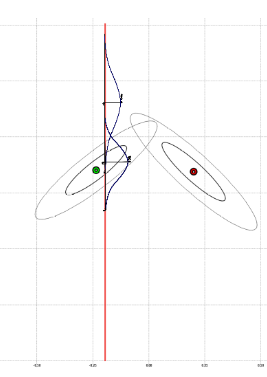
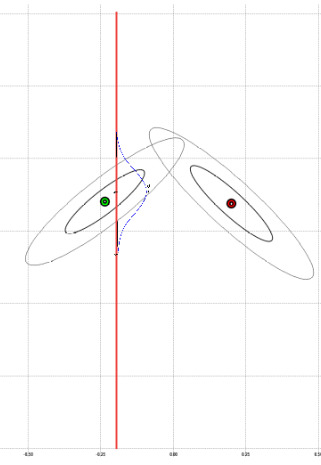
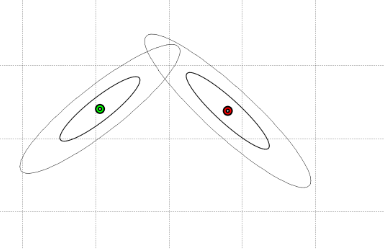
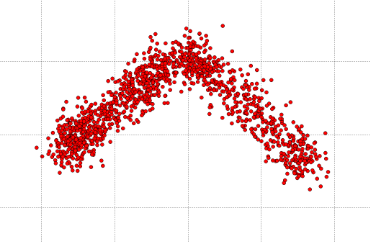
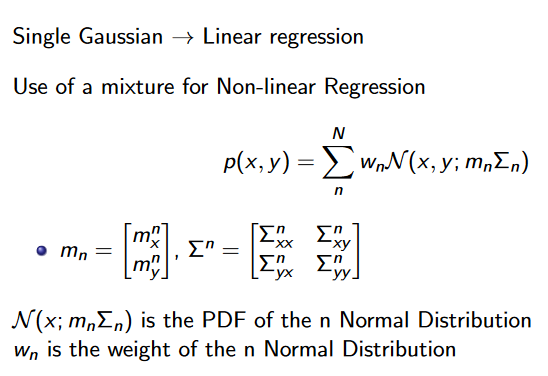
Regression with Gaussian Distributions



Regression with single Gaussian Distribution





**Regression with Gaussian Mixtures** **Stable Estimator of Dynamical Systems –SEDS**

