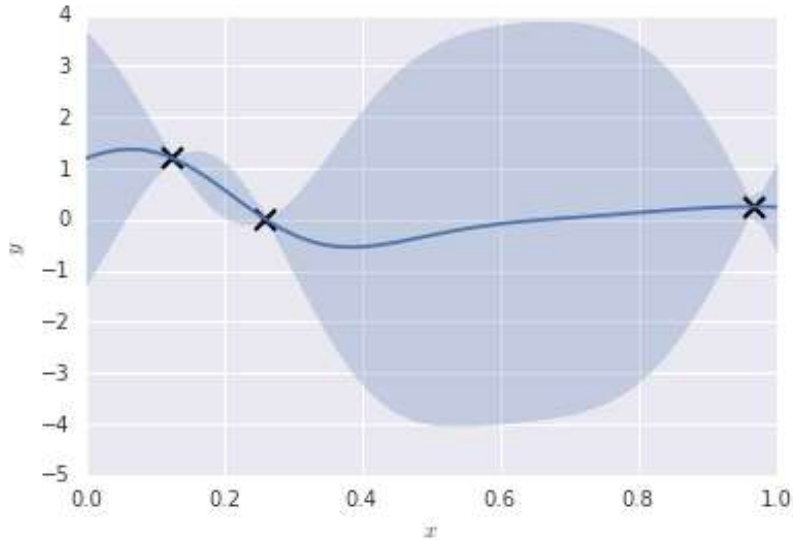# Lecture 23: Bayesian global optimization

Professor Ilias Bilionis

Maximum mean: A very bad information acquisition function

Maximum mean

Add the point with the maximum expected mean:

$$a(x) = m_n^*(x)$$

Tries to exploit what we know.

It does not converge.

How can we add some elements of exploration?

PREDICTIVE SCIENCE LABORATORY