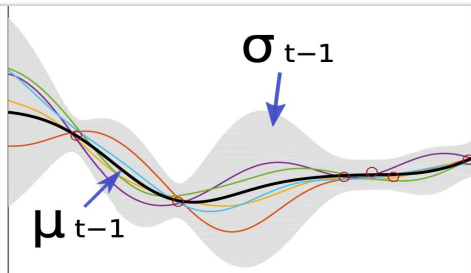


Summary of how BayesOpt works

Posterior estimation



$t \leftarrow t + 1$

Evaluate f at
 $x_t = \arg \max \alpha_t(x)$

Define an acquisition function

UCB: $\mu_{t-1}(x) + \beta \sigma_{t-1}(x)$

El: $\mathbb{E} [(f(x) - \max y_\tau)_+]$

PI: $\Pr[f(x) \geq \max y_\tau + \epsilon]$

ES: $I(\{x, y\}; x_* \mid D_t)$
 $I(\{x, y\}; y_* \mid D_t)$

and others...