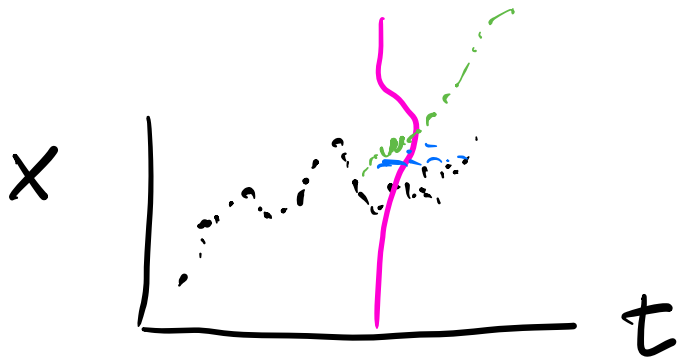
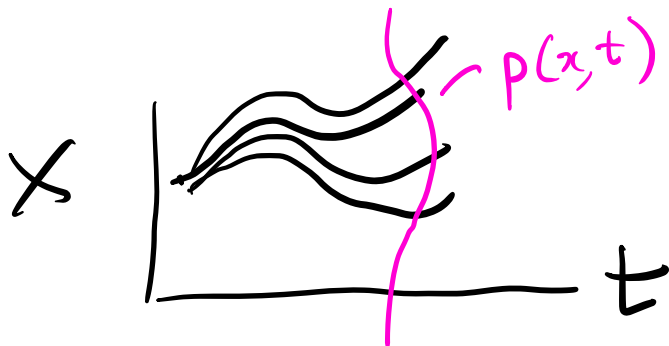


OPEN SEATING DAY

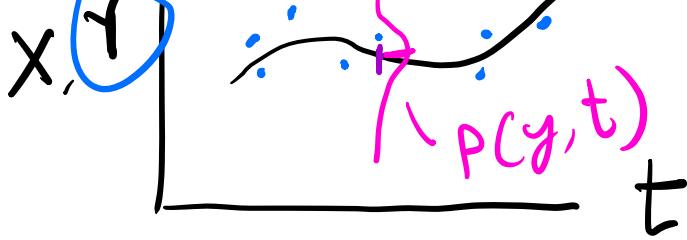
STOCHASTICITY



STOCHASTIC
PROCESS



HETEROGENEITY

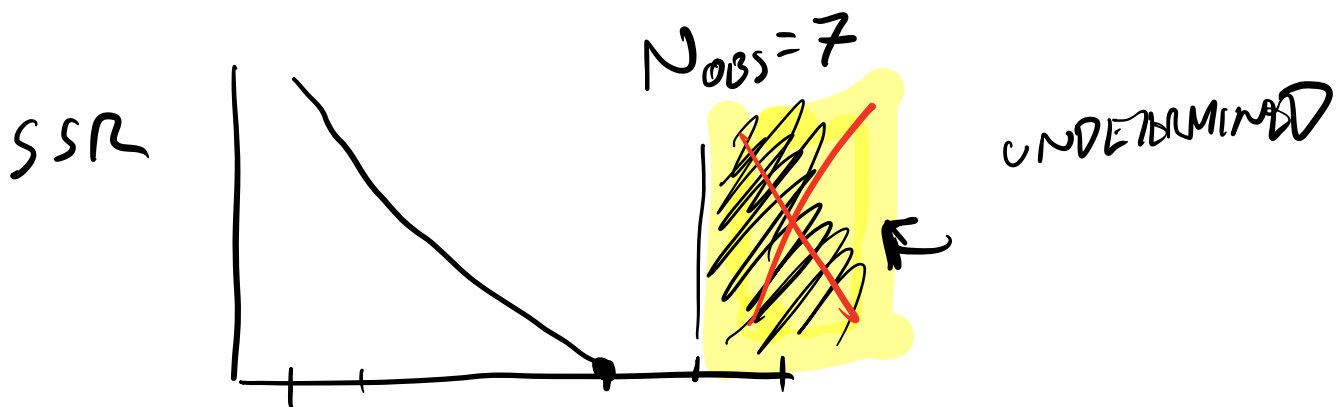
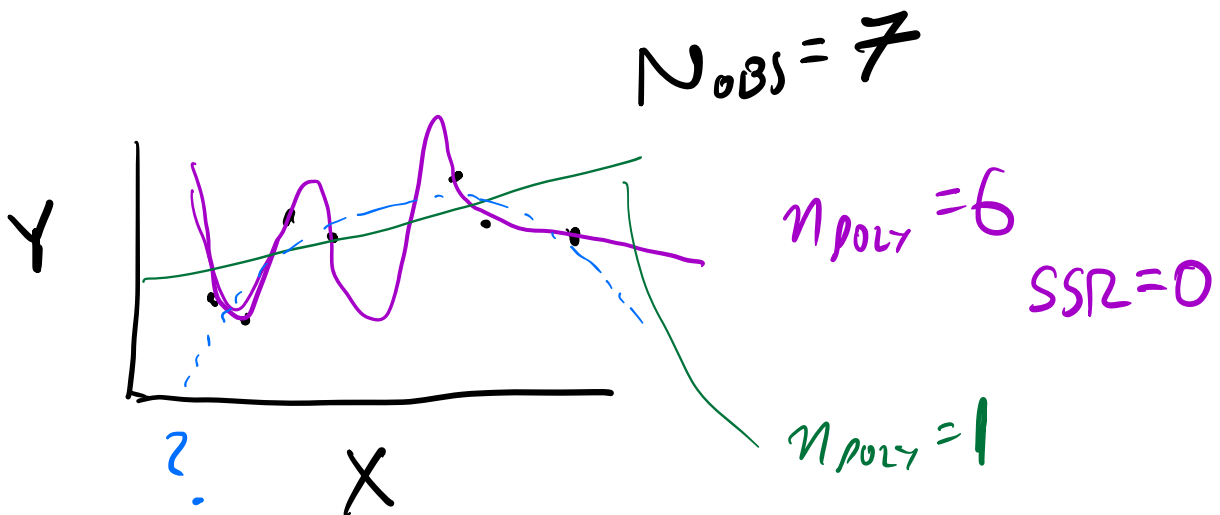


OBSERVATION
NOISE
MEASUREMENT
ERROR

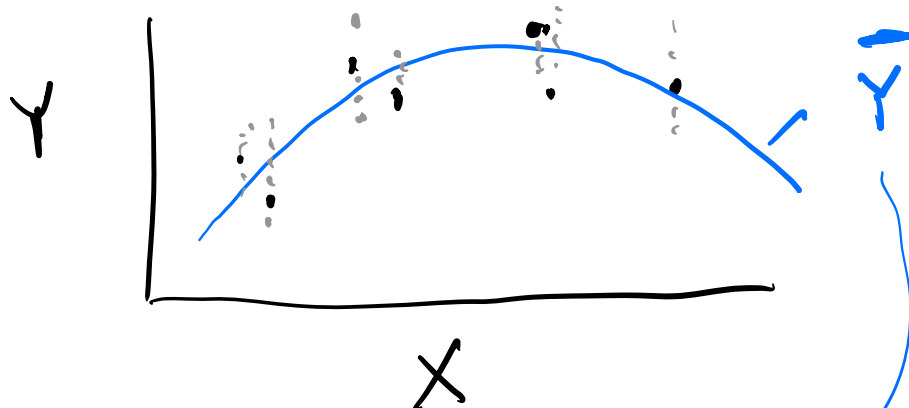
MODEL COMPLEXITY

VARIANCE - BIAS TRADE OFF

CROSS VALIDATION

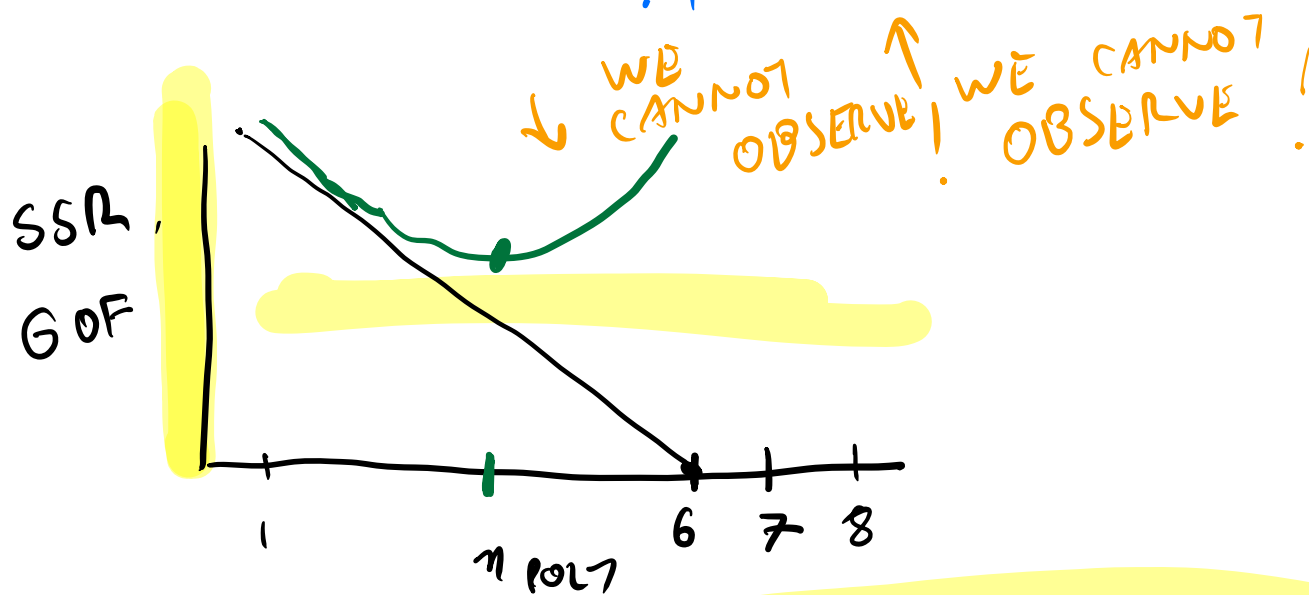


1 2 6 7 8
 n_{POLY}



GOODNESS OF FIT

$$GOF = \sum_{i=1}^{N_{OBS}} (\bar{Y}_i - y(x_i))^2$$



SSR
 GOF

$\frac{1}{N_{OBS}}$

χ^2

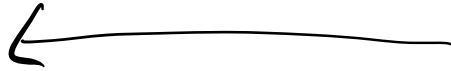
← SIMPLICITY → COMPLEXITY

LOW
VARIANCE



HIGH
VARIANCE IN β 'S

HIGH
BIAS



LOW BIAS
(in model
choice)

EX

GENERALITY

SIMPLE

DETAIL

COMPLEX

• ALL
IMMUNORESPONSE ✓

• LESS
PRECISE ⚡

PD-1 MOUSE

PD-1 HUMAN

CROSS VALIDATION



┌──────────────────┐

TRAINING
SET

↓
GOF



SSR

"LOOC":

LEAVE

ONE

OUT

CROSS-VALIDATION

"K-FOLD":

