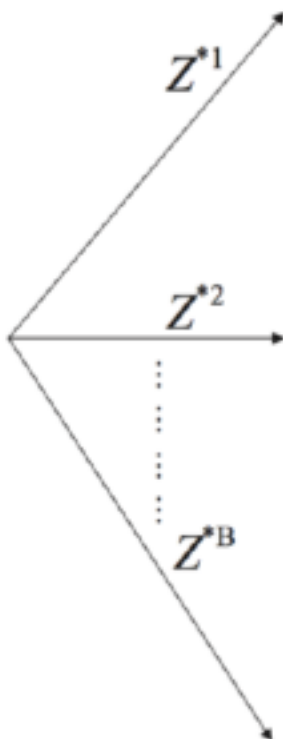




The Bootstrap

Obs	X	Y
1	4.3	2.4
2	2.1	1.1
3	5.3	2.8

Original Data (Z)



Obs	X	Y
3	5.3	2.8
1	4.3	2.4
3	5.3	2.8

Obs	X	Y
2	2.1	1.1
3	5.3	2.8
1	4.3	2.4

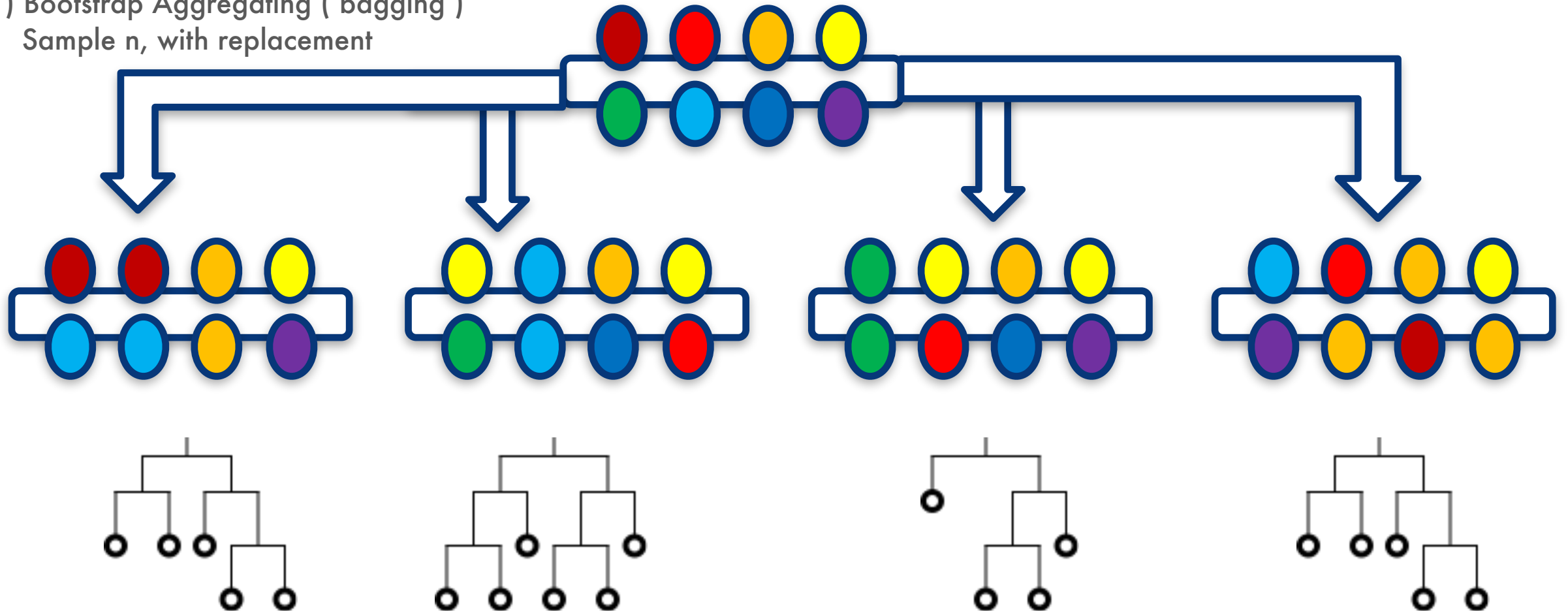
⋮

Obs	X	Y
2	2.1	1.1
2	2.1	1.1
1	4.3	2.4

James Watson Hestie Ann Hestie

RF Tree Variance: Bagging

1) Bootstrap Aggregating ('bagging')
Sample n, with replacement



$$f_M(\mathbf{x}) = \sum_{i=1}^M T_i(\mathbf{x})$$

The Bootstrap

