

## Tree Growth with Data Parallelism















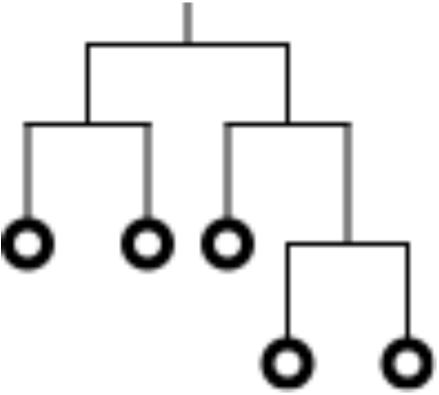












$$\mathbf{X} = \{\mathbf{X}_1, \dots, \mathbf{X}_K\}$$

## $\mathbf{math}\left(\mathbf{X_{1}}\right)$

## $\mathbf{math}\left(\mathbf{X_2}\right)$

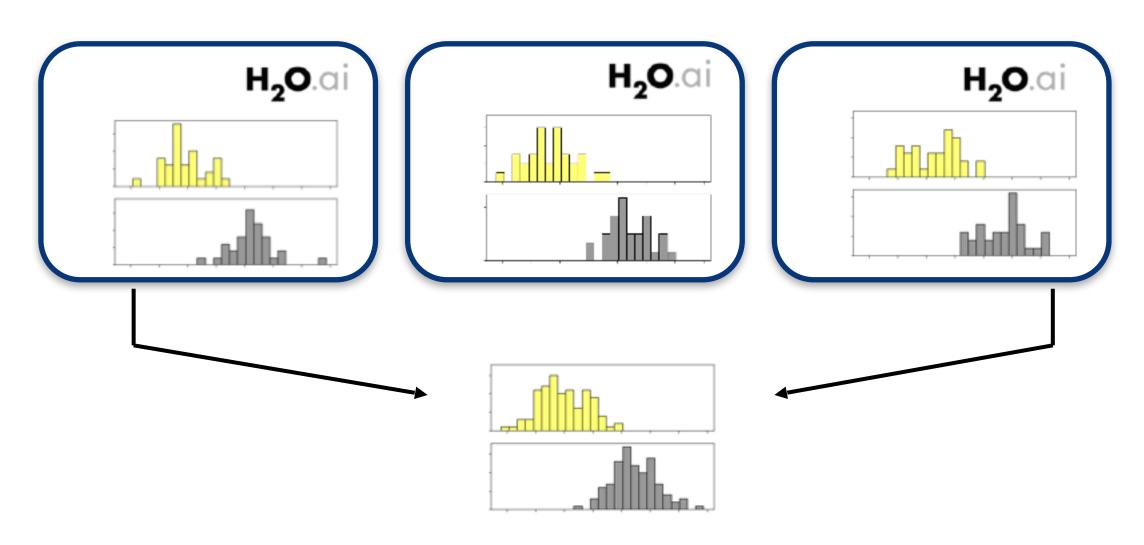
$$\mathbf{math}\left(\mathbf{X}_{\mathbf{K}}
ight)$$

$$\{X_i; t_i\} = f(\mathbf{math}(\mathbf{X_1}), \dots, \mathbf{math}(\mathbf{X_K}))$$



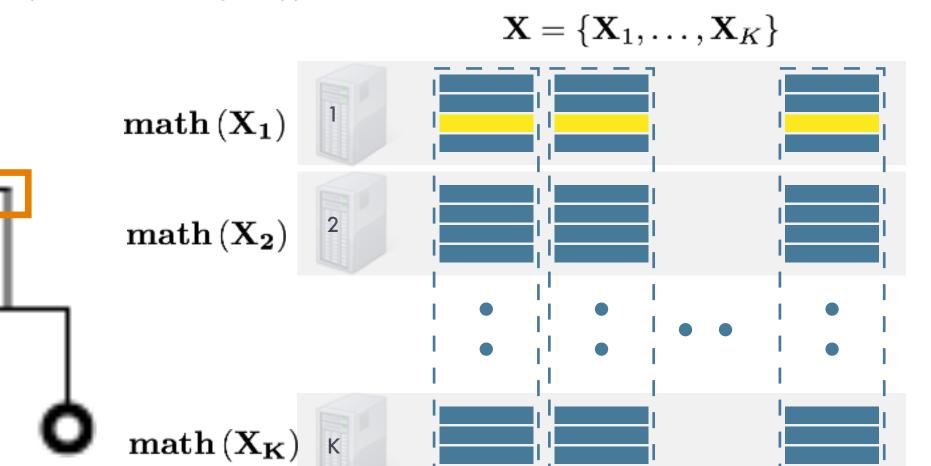
#### Full Data Parallelism for Each Level of Tree Growth!

# Splitting with Distributed Data



#### Tree Growth with Data Parallelism

$$\{X_i; t_i\} = f(\mathbf{math}(\mathbf{X_1}), \dots, \mathbf{math}(\mathbf{X_K}))$$



Full Data Parallelism for Each Level of Tree Growth!

