

Mapping substitutions with SLAC

- SLAC capable of detecting selection, is fast, but generally lacks power
- It provides a number of intuitive metrics for interpreting selection results
- SLAC recovers ancestral states and allows one to “map” evolutionary history onto a tree.

```
hyphy slac --alignment data/spike.fas --tree data/spike.tree --branches Internal
```

Partition ↕	Site ↕	ES ↕	EN ↕	S ↕	N ↕	P[S] ↕	dS ↕	dN ↕	dN- dS ↕	P [dN/dS > 1] ⚑	P [dN/dS < 1] ↕	Total branch length ↕
1	452	1.75	1.25	0.00	1.00	0.584	0.00	0.801	49.6	0.416	1.00	0.0162
1	367	0.996	2.00	0.00	2.00	0.332	0.00	0.998	61.8	0.446	1.00	0.0162

