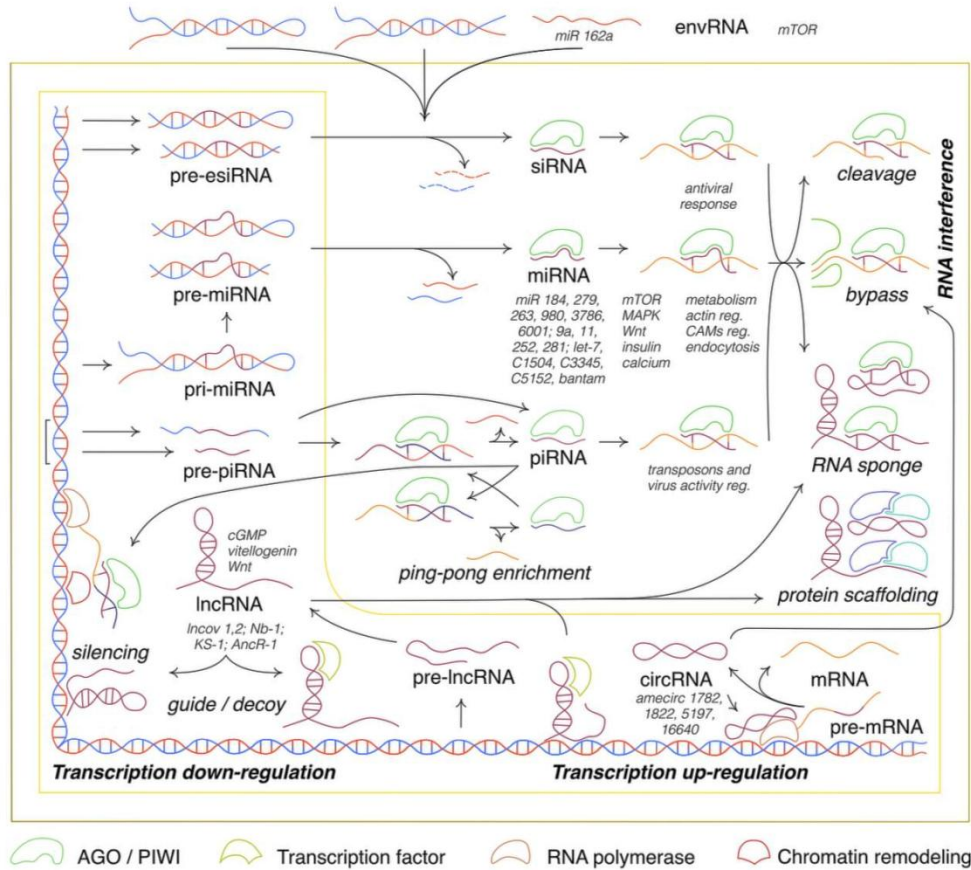


Boo Bees

Hymenoptera eusociality

Smutin Daniil

Idea



Link between

eusociality

repeats

ncRNAs



Smutin et al., 2024

Pipeline

Organisms

Hymenoptera

Data

16S

coxI

repeats

Alignment

MAFFT

Phylogeny

BEAST

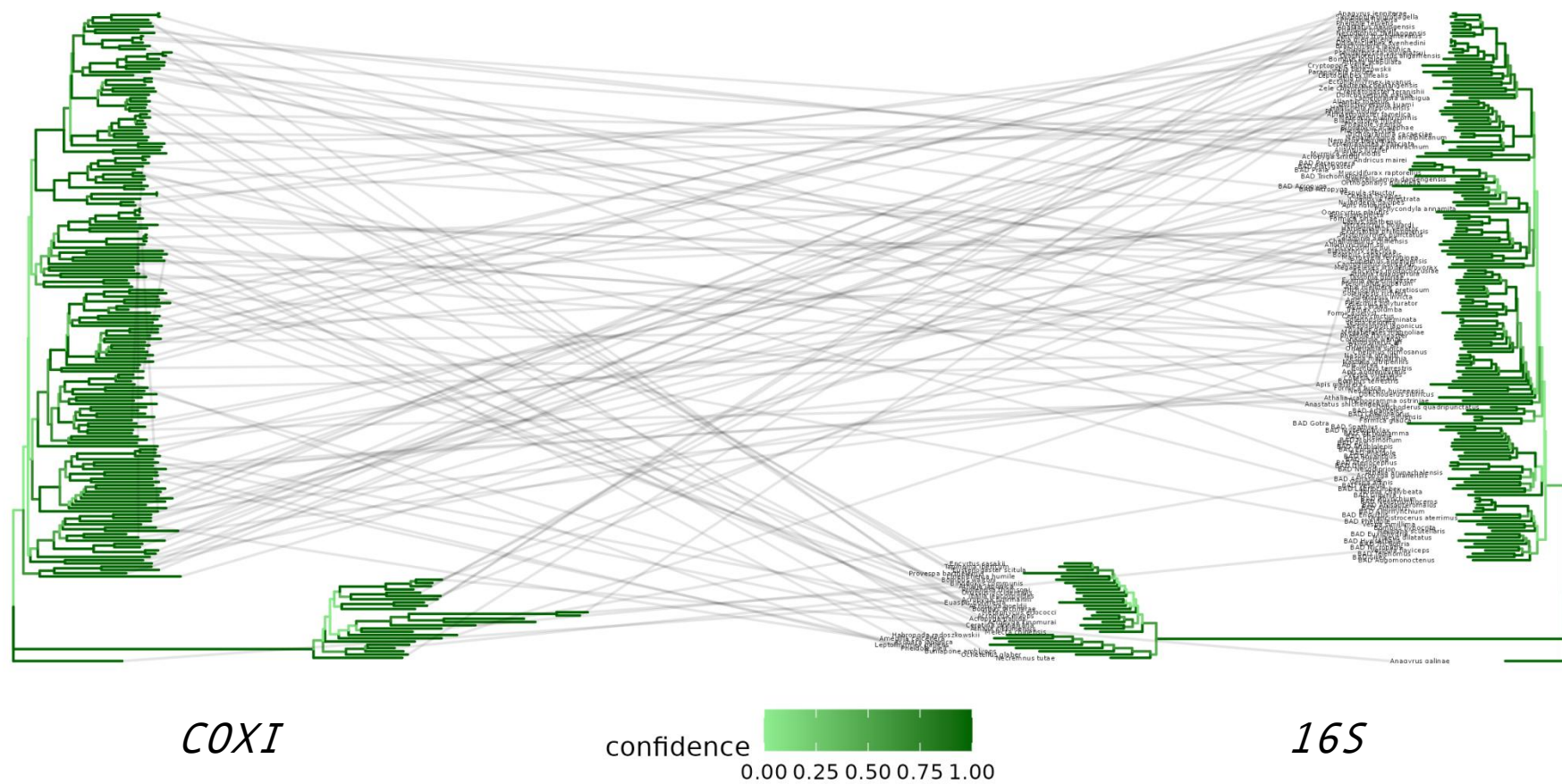
MrBayes

NJ

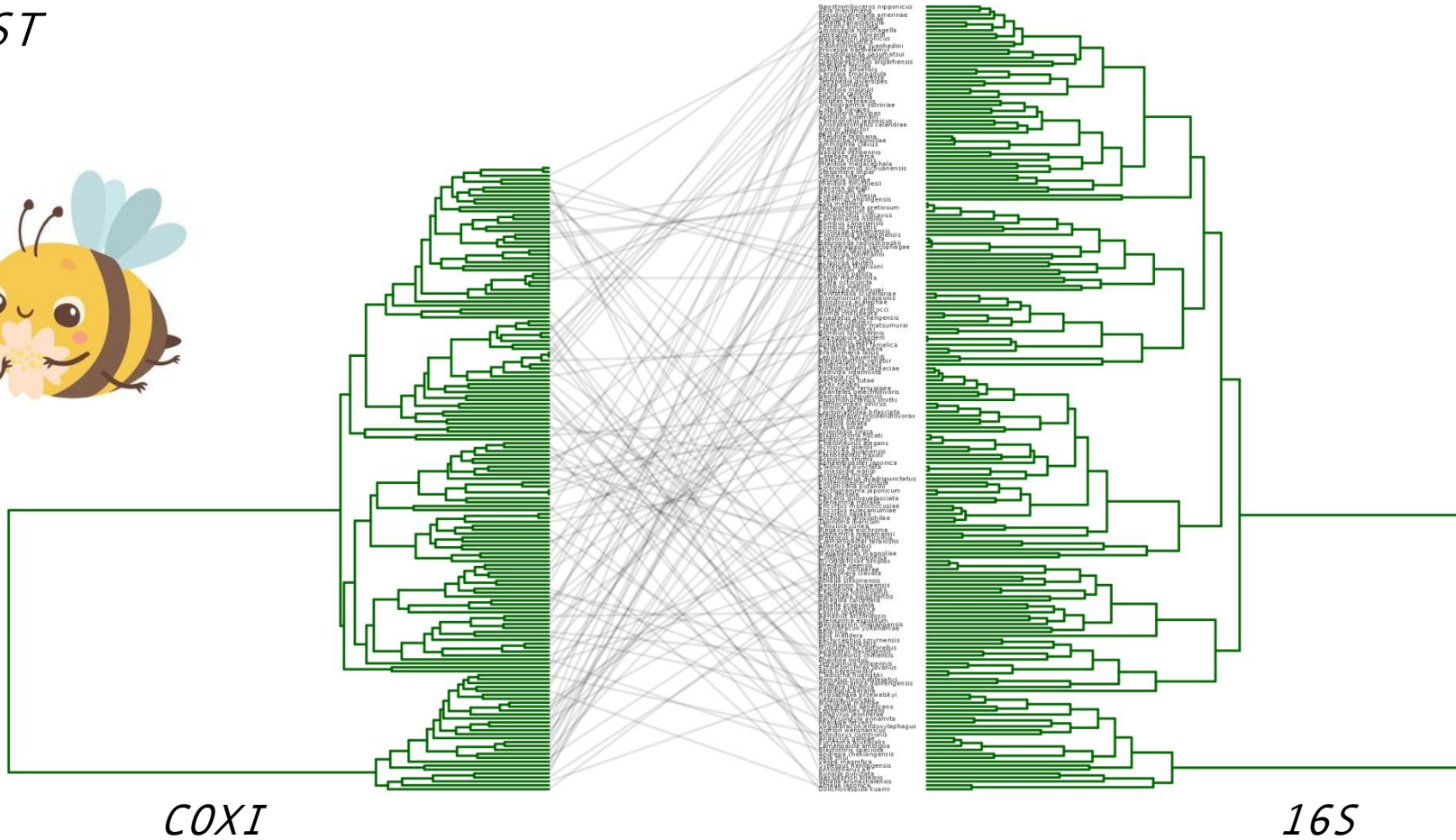


Results: tree topology

NJ

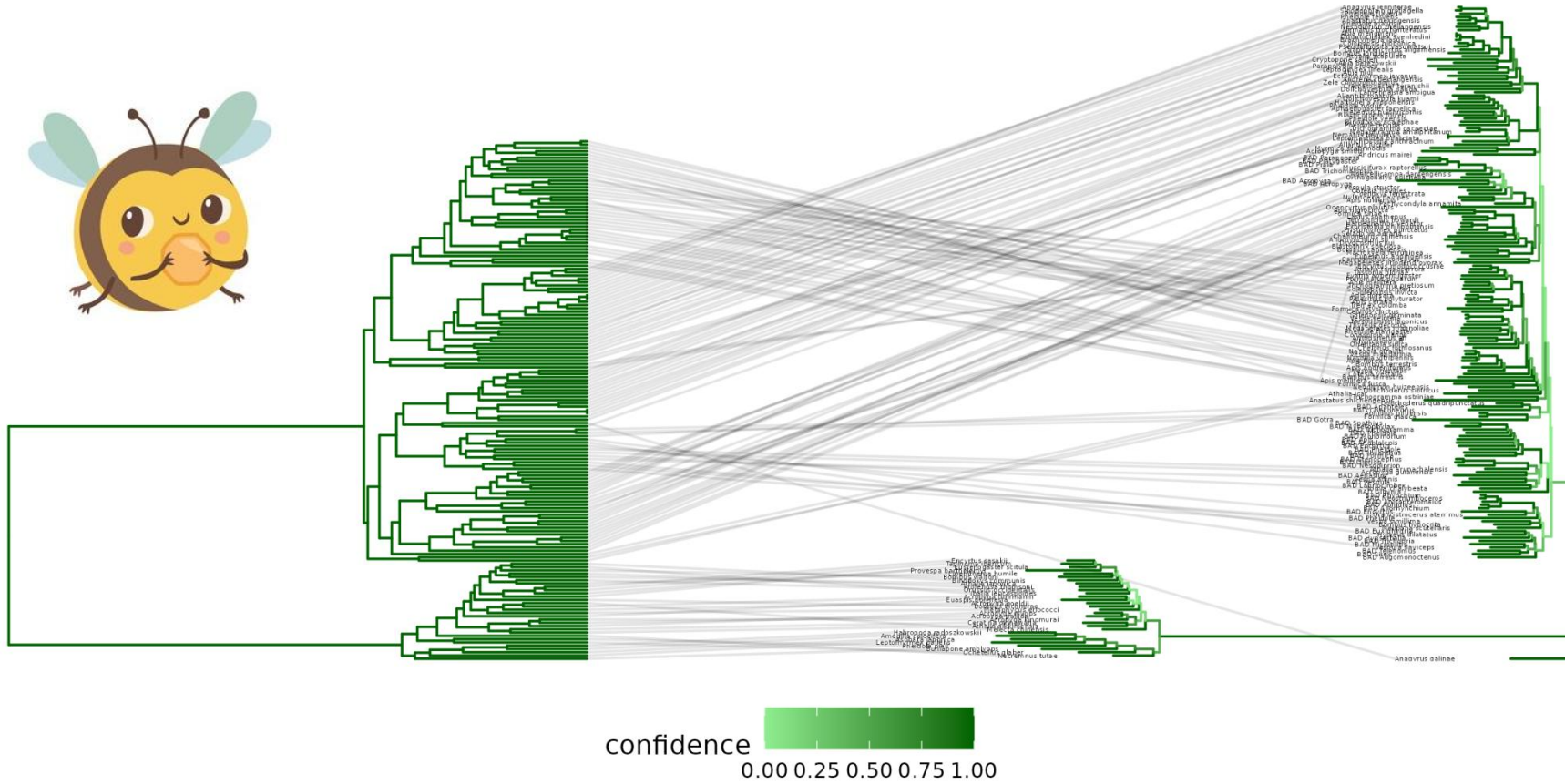


Results: tree topology *BEAST*



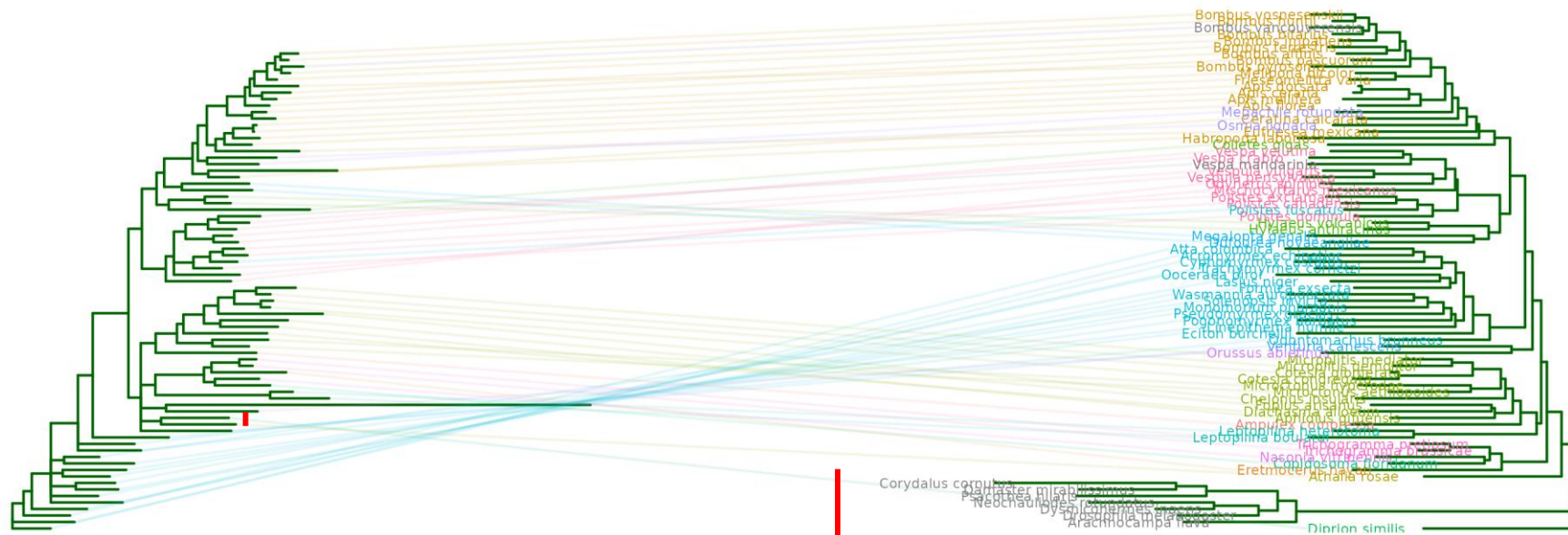
Results: tree topology

BEAST vs NJ: COXI



Results: tree topology

iqtree ML vs MrBayes: COXI



a Ampulicidae	a Braconidae	a Figitidae	a Megachilidae	a Vespidae
a Aphelinidae	a Colletidae	a Formicidae	a Orussoidea	a NA
a Apidae	a Diprionidae	a Halictidae	a Pteromalidae	
a Athaliidae	a Encyrtidae	a Ichneumonidae	a Trichogrammatidae	





that's all folks

Results: tree with data *eusociality*



Social

- FACULTATIVE
- NO
- PRIMITIVELY EUSOCIAL
- SUBSOCIAL
- YES
- NA

