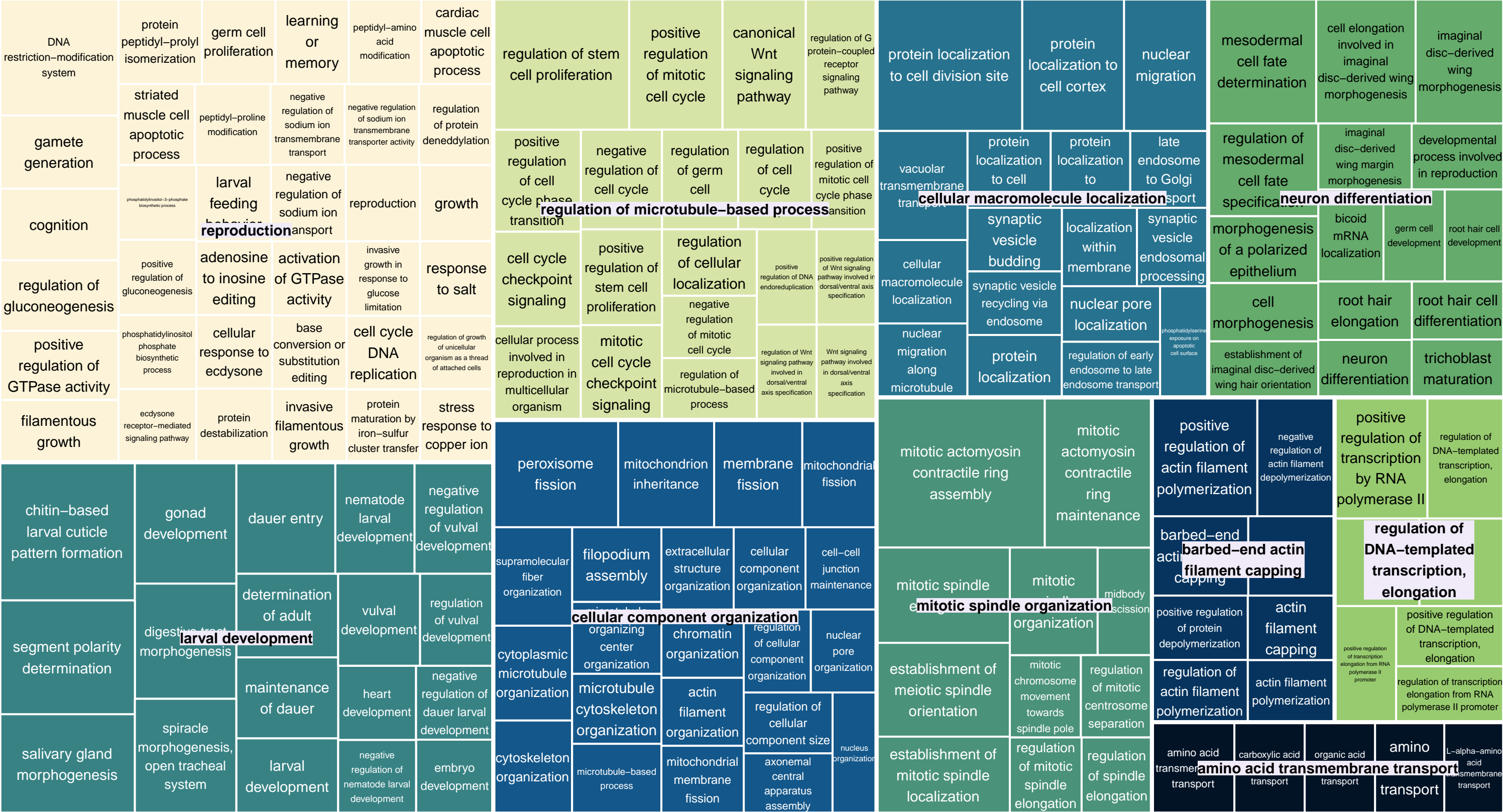
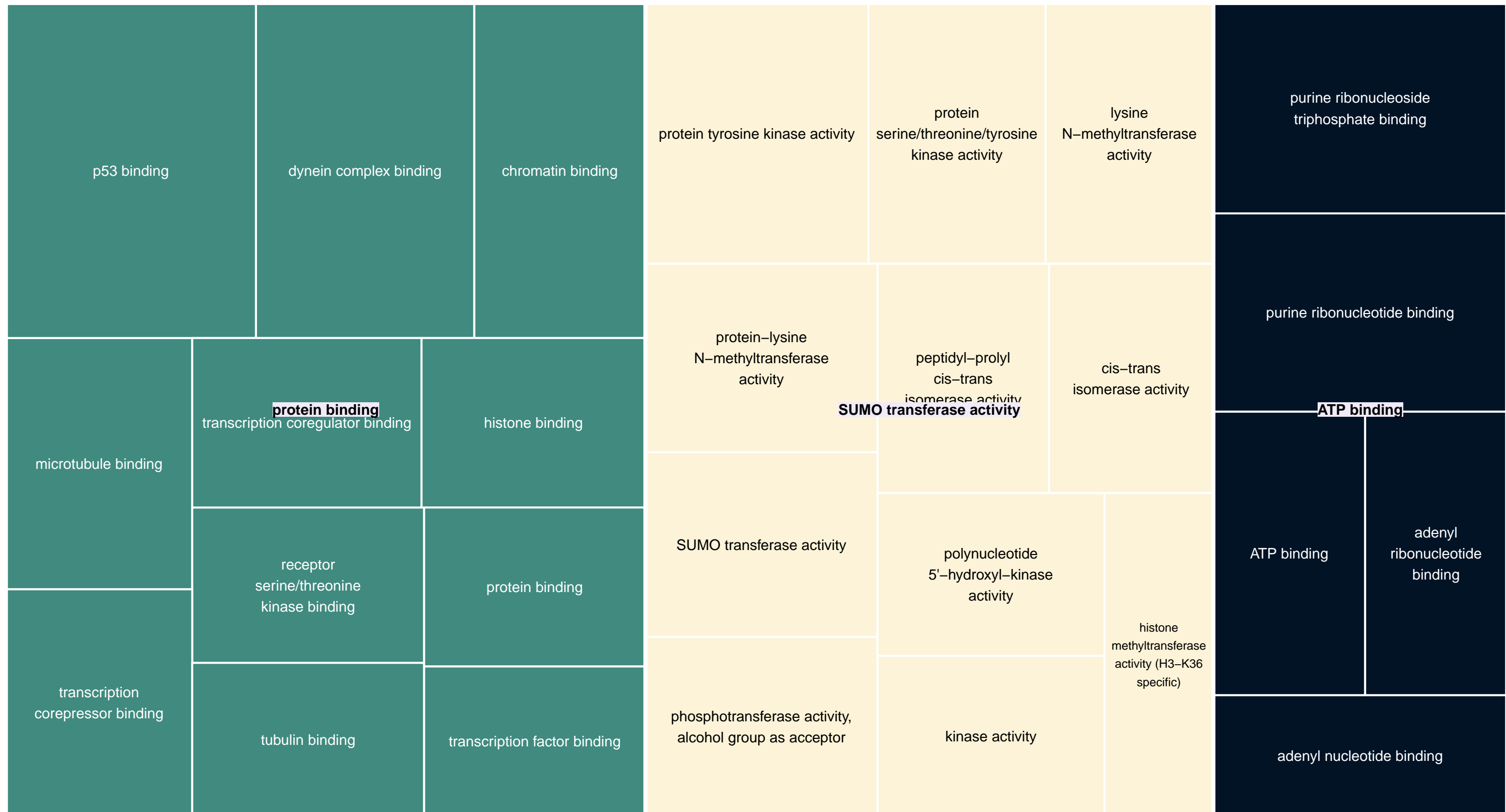


**Supplementary Material 6.** Enrichments Differentially Expressed Genes (DEGs) under selection. Treemaps showing enriched GO terms (BP: Biological Processes, MF: Molecular Functions, CC: Cellular Components) in DGEs arisen in Tricladida (node 65), Continenticola (node64), Geoplanoidea (node 63), and Geoplaniidae (node 62) with shift selection signal

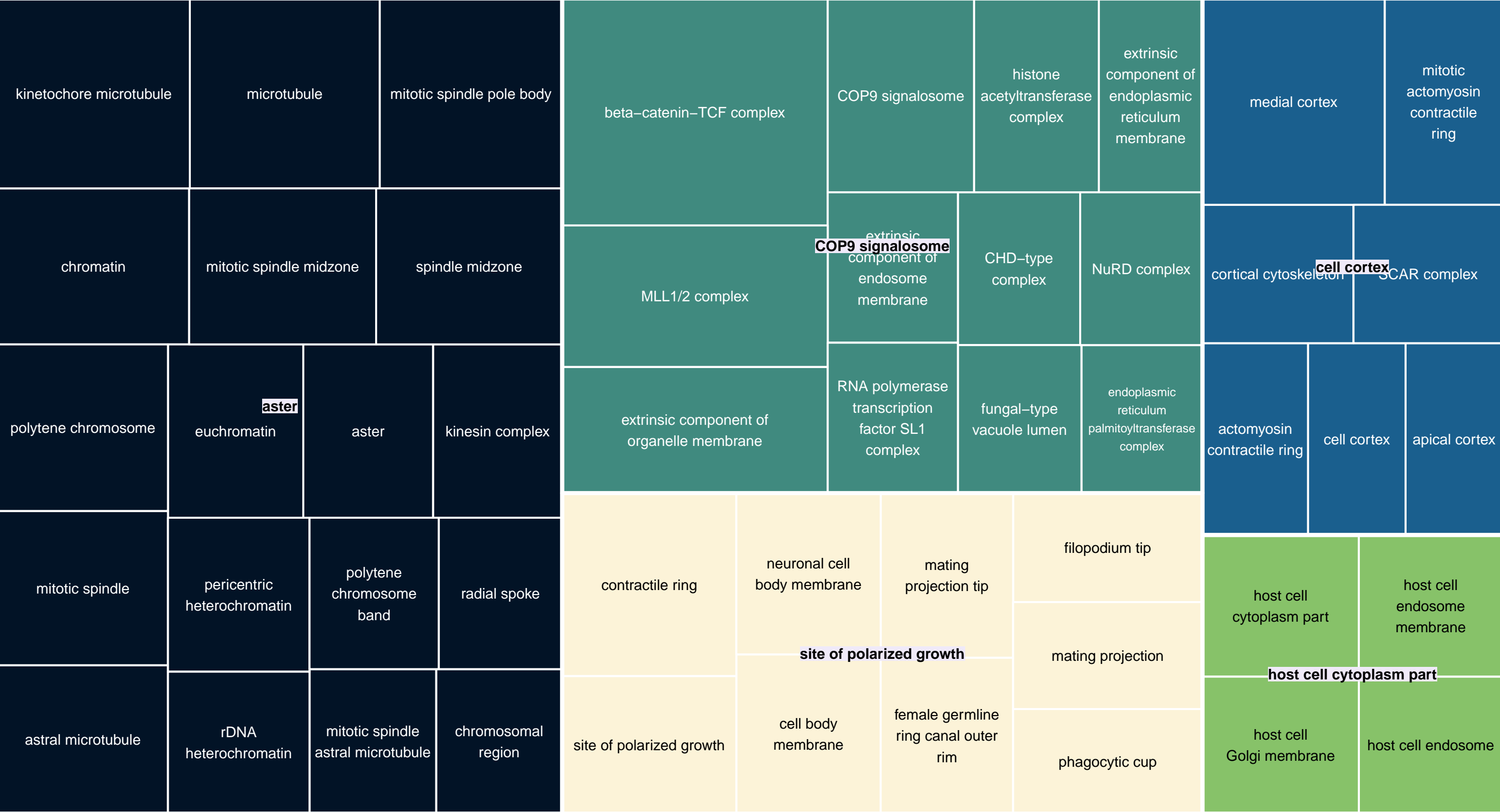
TreeMap\_Enrichm\_DGEs\_ONUN\_Sel\_node65\_BP



TreeMap\_Enrichm\_DGEs\_ONUN\_Sel\_node65\_MF



TreeMap\_Enrichm\_DGEs\_ONUN\_Sel\_node65\_CC







TreeMap\_Enrichm\_DGEs\_ONUN\_Sel\_node64\_MF



eukaryotic translation initiation factor 4F complex	actomyosin contractile ring	MICOS complex	sperm connecting piece	phagophore assembly site membrane	phosphatase complex	
Cvt complex	ESCRT complex	ESCRT-0 complex	mating-type region heterochromatin	pericentriolar material		RNA-directed RNA polymerase complex
	centriole	PML body	phagophore assembly site	shelterin complex		RNA-directed RNA polymerase complex

eukaryotic translation initiation factor 4F complex

actomyosin contractile ring

# MICOS complex

sperm connecting piece

phagophore assembly  
site membrane

phosphatase complex

Cvt complex

ESCRT complex

Cvt complex

ESCRT complex

Cvt complex

ex

ESCRT-0 complex

mating-type region  
heterochromatin

pericentriolar material

## RNA-directed RNA polymerase complex

beta-catenin-TCF complex

centriole

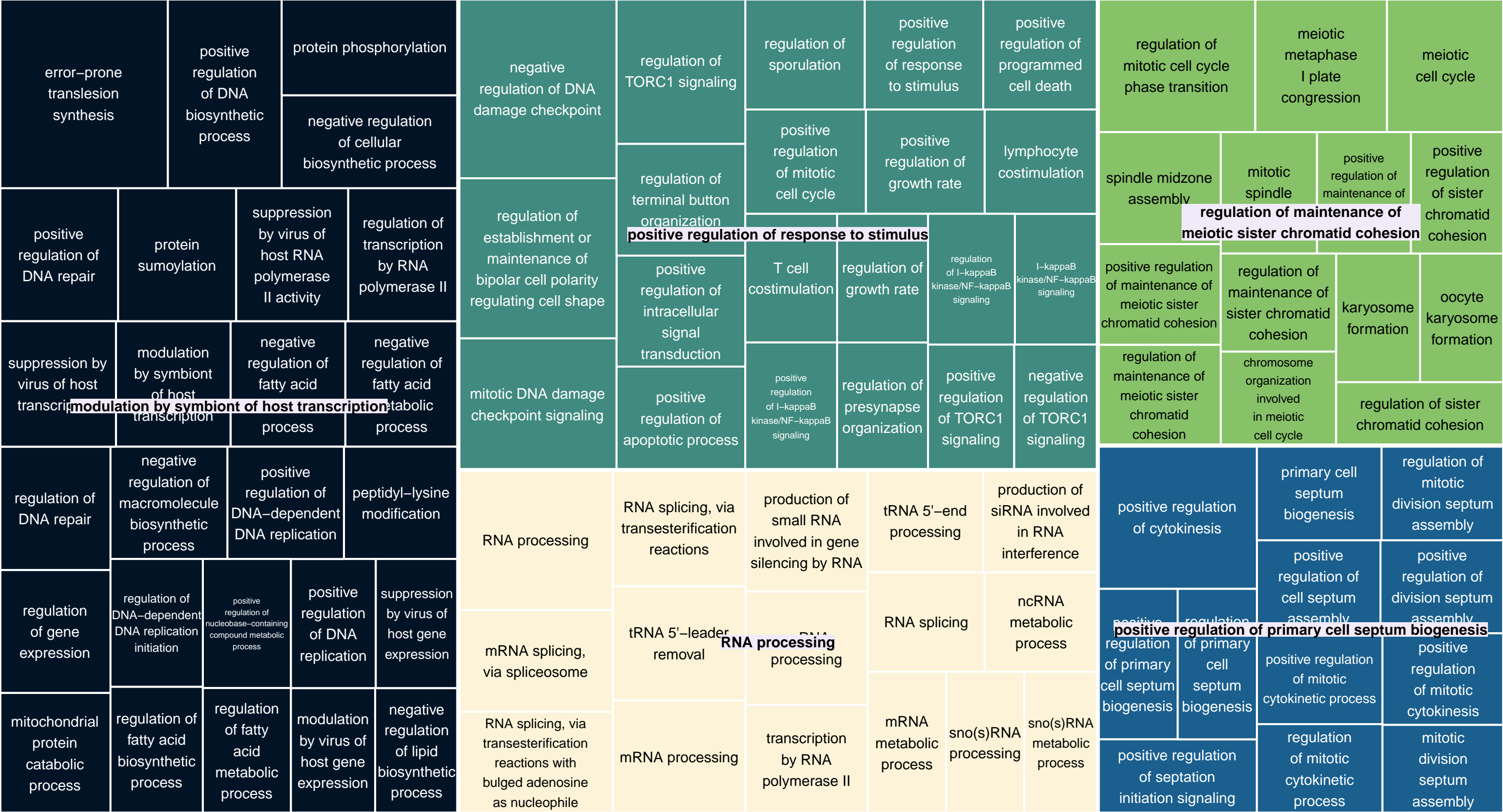
PML body

phagophore assembly site

shelterin complex

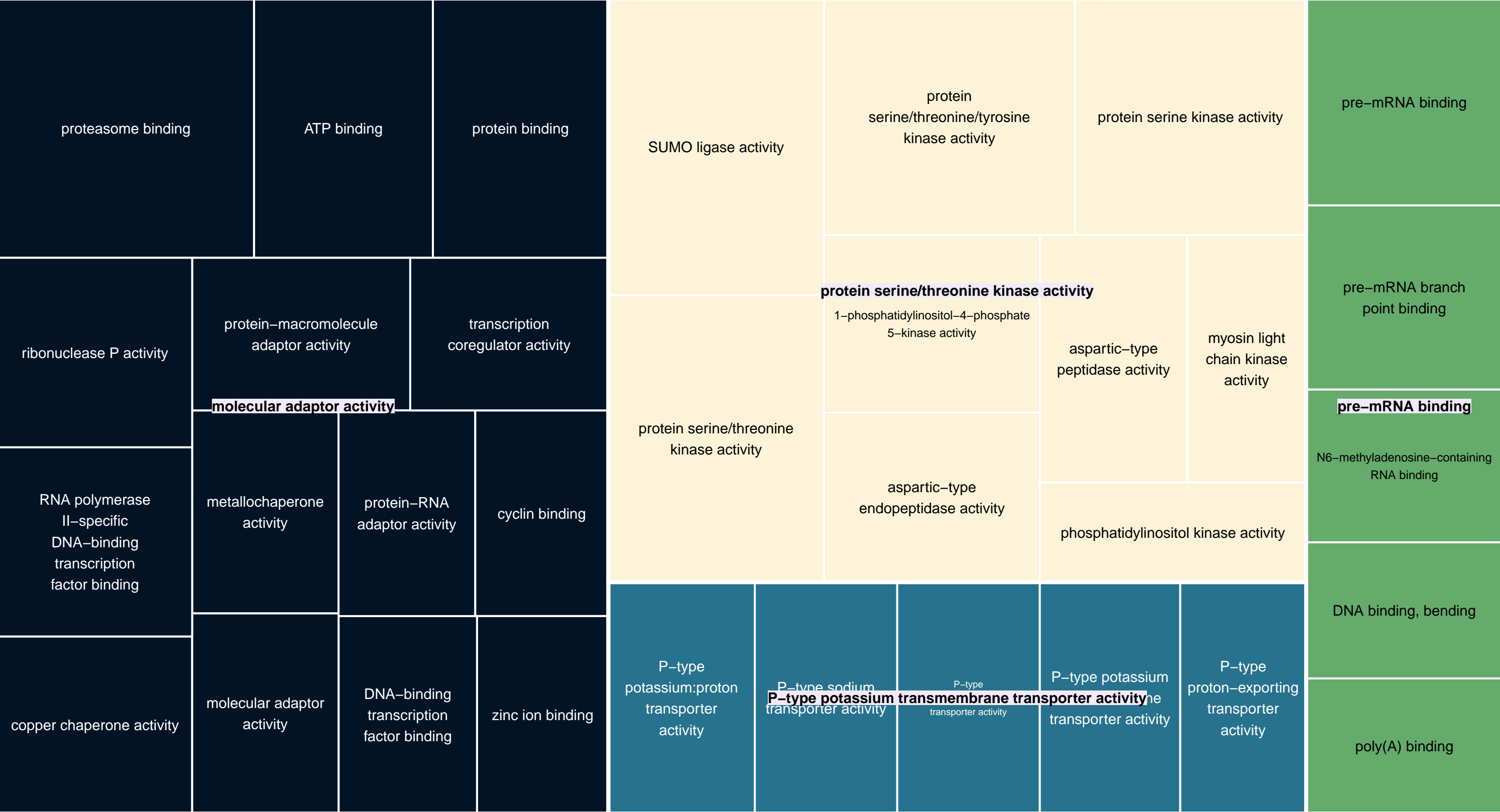
RNA-directed RNA polymerase complex

TreeMap\_Enrichm\_DGEs\_ONUN\_Sel\_node63\_BP





TreeMap\_Enrichm\_DGEs\_ONUN\_Sel\_node63\_MF



TreeMap\_Enrichm\_DGEs\_ONUN\_Sel\_node63\_CC

