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library(png)
library(ggplot2)
library(grid)

pic <- readPNG("../Figures/schema.png")

pic_grob <- rasterGrob(pic, interpolate = TRUE)

plt <- qplot(1:14, 1:14, geom = "blank") +
  annotation_custom(pic_grob,
                    xmin = -Inf,
                    xmax = Inf,
                    ymin = -Inf,
                    ymax = Inf) +

  theme_void()

print(plt)

```

Metadata

- ipm\_id
- species\_author
- species\_accepted
- tax\_genus
- tax\_order
- tax\_class
- tax\_phylum
- kingdom
- organism\_type
- dicot\_monocot
- angio\_gymno
- authors
- journal
- pub\_year
- doi
- corresponding\_author
- email\_year
- remark
- apa\_citation
- demog\_appendix\_link
- duration
- start\_year
- start\_month
- end\_year
- end\_month
- periodicity
- population\_name
- number\_publications
- lat
- lon
- altitude
- country
- continent
- ecoregion
- studied\_sex
- eviction\_used
- evict\_type
- treatment
- has\_time\_lag
- has\_age
- has\_dd
- is\_periodic

StateVariables

- ipm\_id
- state\_variable
- discrete

ContinuousDomains

- ipm\_id
- state\_variable
- domain
- lower
- upper
- kernel\_id
- notes

IntegrationRules

- ipm\_id
- state\_variable
- domain
- n\_meshpoints
- integration\_rule
- kernel\_id

StateVectors

- ipm\_id
- expression
- n\_bins
- comment

IpmKernels

- ipm\_id
- kernel\_id
- formula
- model\_family
- domain\_start
- domain\_end

VitalRateExpr

- ipm\_id
- demographic\_parameter
- formula
- model\_type
- kernel\_id

ParameterValues

- ipm\_id
- demographic\_parameter
- state\_variable
- parameter\_name
- parameter\_value

EnvironmentalVariables

- ipm\_id
- env\_variable
- vr\_expr\_name
- env\_range
- env\_function
- model\_type

ParSetIndices

- ipm\_id
- env\_variable
- vr\_expr\_name
- range
- kernel\_id
- drop\_levels