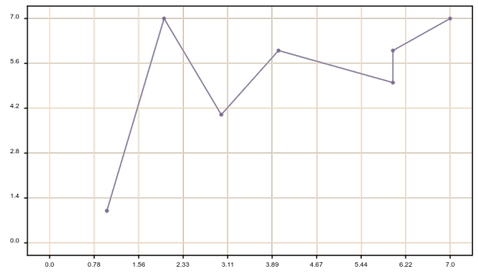
Matplotex

Cheat sheet

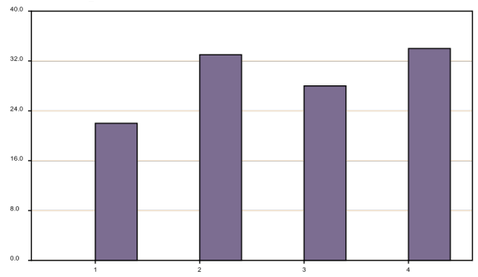
Quick start

```
x = [1, 2, 3, 4, 6, 6, 7]
y = [1, 7, 4,6, 5, 6, 7]
x
|> Matplotex.plot(y, color: "#D278AA")
|> Matplotex.figure(%{figsize: {5,5}})
|> Matplotex.show()
```



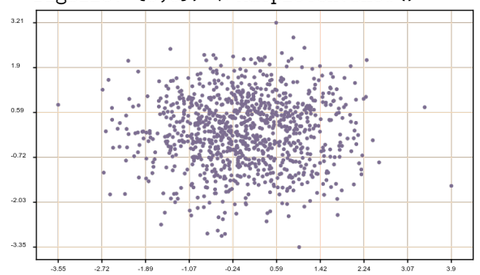
Barchart

```
categories =  [1,2,3,4]
 values = [22, 33, 28, 34]
 width = 0.22
 Matplotex.bar(values,width,
 color: "#7C6D91")
 |> Matplotex.figure(%{figsize: {6,6}})
 |> Matplotex.set_xticks(categories)
 |> Matplotex.hide_v_grid()
 |> Matplotex.show()
```



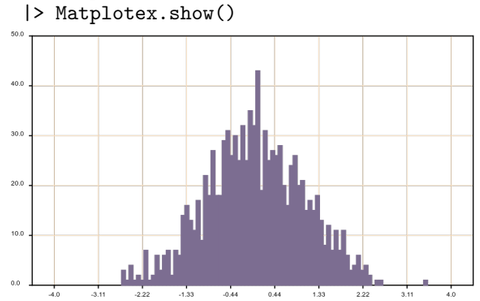
Scatter plot

```
x= Nx.Random.key(12)
|> Nx.Random.normal(0, 1, shape: {1000})
|> elem(0) |> Nx.to_list()
y = Nx.Random.key(13)
|> Nx.Random.normal(0, 1, shape: {1000})
|> elem(0)
|> Nx.to_list()
x|>Matplotex.scatter(y, color: "#7C6D91",
 figsize: {6,6}) |>Matplotex.show()
```



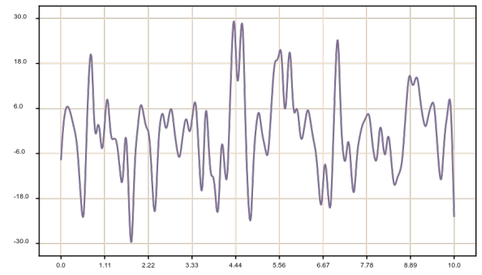
Histogram

```
values = Nx.Random.key(12)
|> Nx.Random.normal(0, 1, shape:{1000})
|> elem(0) |> Nx.to_list()
bins = 100
Matplotex.hist(values, bins,
color: "#7C6D91"
)
|> Matplotex.set_ylim({0, 50})
|> Matplotex.show()
```



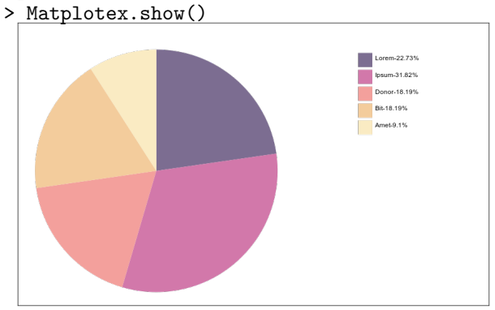
Spline graph

```
x = Nx.linspace(0, 10, n: 100)
|> Nx.to_list()
y = Nx.Random.key(12)
|> Nx.Random.normal(0, 10, shape: {100})
|> elem(0) |> Nx.to_list()

Matplotex.spline(x, y,
edge_color: "#7C6D91", line_width: 3)
|> Matplotex.set_ylim({-30, 30})
|> Matplotex.show()
```



Pie chart

```
# Percentages for each slice
sizes = [25, 35, 20, 20, 10]
 # Labels for each slice
labels = ["Lorem", "Ipsum", "Donor",
"Bit", "Amet"]
# Colors for the slices
colors = ["#7C6D91", "#D278AA", "#F3A09C",
"#F3CC9C","#FAEBC3"]

sizes
|> Matplotex.pie(colors: colors,
labels: labels)
|> Matplotex.set_rc_params(%{line_width: 1,
legend_width: 0.25})
|> Matplotex.show()
```



Configur options

```
x
|> Matplotex.plot(y1, color: "blue",
linestyle: "_", marker: "o", label: "Dataset 1")
|> Matplotex.plot(x, y2, color: "red",
linestyle: "--", marker: "^",
label: "Dataset 2") # Multiple datasets
label: "Dataset 3")
|> Matplotex.set_title("Title")
|> Matplotex.set_xticks([1, 2, 3, 4, 5])
# Add ticks
|> Matplotex.set_xlabel("X-Axis")
# Add X label
|> Matplotex.set_ylabel("Y-Axis")
# Add Y label
|> Matplotex.set_xlim({0, 20})
#Upper and lower bonds
|> Matplotex.set_ylim({0, 20})
|> Matplotex.set_rc_params(
      x_tick_font_size: font_size,
      font_style: font_styl,
      font_family: font_family,
      font_weight: font_weight,
      y_tick_font_size: font_size,
      title_font_size: title_font_size,
      x_label_font_size: font_size,
      y_label_font_size: font_size,
      title_font_size: title_font_size
)
```