

# visKernels

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visKernels

*Function to visualize neighborhood kernels*

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## Description

visKernels is supposed to visualize a series of neighborhood kernels, each of which is a non-increasing functions of: i) the distance  $d_{wi}$  between the hexagon/rectangle  $i$  and the winner  $w$ , and ii) the radius  $\delta_t$  at time  $t$ .

## Usage

```
visKernels(newpage = T)
```

## Arguments

newpage                      logical to indicate whether to open a new page. By default, it sets to true for opening a new page

## Value

invisible

## Note

There are five kernels that are currently supported:

- For "gaussian" kernel,  $h_{wi}(t) = e^{-d_{wi}^2/(2*\delta_t^2)}$
- For "cutgaussian" kernel,  $h_{wi}(t) = e^{-d_{wi}^2/(2*\delta_t^2)} * (d_{wi} \leq \delta_t)$
- For "bubble" kernel,  $h_{wi}(t) = (d_{wi} \leq \delta_t)$
- For "ep" kernel,  $h_{wi}(t) = (1 - d_{wi}^2/\delta_t^2) * (d_{wi} \leq \delta_t)$
- For "gamma" kernel,  $h_{wi}(t) = 1/\Gamma(d_{wi}^2/(4 * \delta_t^2) + 2)$

These kernels above are displayed within a plot for each fixed radius. Three different radii (i.e., 1 and 2) are illustrated.

## See Also

[sTrainSeq](#), [sTrainBatch](#)

**Examples**

```
# visualise currently supported five kernels  
visKernels()
```