# visKernels

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visKernels

Function to visualize neighborhood kernels

### **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 = TRUE)
```

#### **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 "cutguassian" kernel,  $h_{wi}(t) = e^{-d_{wi}^2/(2*\delta_t^2)}*(d_{wi} \leq \delta_t)$
- For "bubble" kernel,  $h_{wi}(t) = (d_{wi} \le \delta_t)$
- For "ep" kernel,  $h_{wi}(t) = (1 d_{wi}^2/\delta_t^2) * (d_{wi} \le \delta_t)$
- • 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

visKernels visKernels

## Examples

# visualise currently supported five kernels
visKernels()