f-23-jupyter-ortog-diag

April 27, 2021

[1]:
```
import numpy as np
```

[2]:
```
s = 1/np.sqrt(2)
```

[3]:
```
v = np.array([[s, s],
              [s, -s]])
v
```

[3]:
```
array([[ 0.70710678,  0.70710678],
       [ 0.70710678, -0.70710678]])
```

[8]:
```
egenværdier = np.array([3.0, -1.0])
```

[9]:
```
v @ np.diag(egenværdier) @ v.T
```

[9]:
```
array([[1., 2.],
       [2., 1.]])
```

[10]:
```
np.diag(egenværdier)
```

[10]:
```
array([[ 3.,  0.],
       [ 0., -1.]])
```

[11]:
```
v.T @ v
```

[11]:
```
array([[1., 0.],
       [0., 1.]])
```

[ ]:
```

```