## Markdown to Jupyter notebook example

Here is a SugarTeX example with eq. 1 and fig. 1.

See PDF of this source if you do not have excellent Unicode support.

$$abla imes \mathbf{B} - rac{1}{c} rac{\partial \mathbf{E}}{\partial t} = rac{4\pi}{c} \mathbf{j}$$

$$abla abla \cdot \mathbf{E} = 4\pi \rho$$

$$abla imes \mathbf{E} + rac{1}{c} rac{\partial \mathbf{B}}{\partial t} = \mathbf{0}$$

$$abla \cdot \mathbf{B} = 0$$

where  $\mathbf{B},\mathbf{E},\mathbf{j}:\mathbb{R}^4 o\mathbb{R}^3$  – vector functions of the form  $(t,x,y,z)\mapsto \mathbf{f}(t,x,y,z),\,\mathbf{f}=(f_{\mathrm{x}},f_{\mathrm{y}},f_{\mathrm{z}})$  .

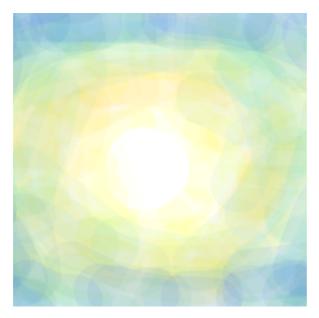


Figure 1: Sample image with cross-references.

In this version of Pandoc image caption fig. 1 works.

```
from IPython.display import Markdown
import pandas as pd
import numpy as np
import tabulatehelper as th

df = pd.DataFrame(np.random.random(16).reshape(4, 4))

Markdown(f'''
{th.md_table(df)}
: Table {{#tbl:table1}}
'''')
```

Table 1: Table

0	1	2	3
0.292058	0.242111	0.51524	0.265014
0.194643	0.201611	0.852484	0.788925
0.135152	0.367743	0.950676	0.846503
0.684186	0.732305	0.790186	0.603836

## Text and tbl. 1

```
import pandas as pd
import numpy as np
df = pd.DataFrame(np.random.random(16).reshape(4, 4))
df
```

```
# R cell:
x <- c(10, 20)
x[1]
```

10

## Header

```
x <- c(10, 20)
x[1]
```

10

Markdown text with SugarTeX formula:  $\alpha^{3.142}$ . It works because of the Markdown display option and SugarTeX Pandoc filter.

```
print('Hello!')
```