## 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  $(t,x,y,z)\mapsto \mathbf{f}(t,x,y,z),\,\mathbf{f}=(f_{\mathrm{x}},f_{\mathrm{y}},f_{\mathrm{z}})$  .

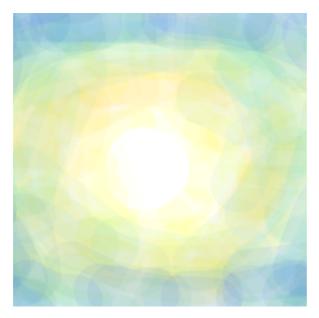


Figure 1: Sample image with cross-references.

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        |
|-----------|----------|-----------|----------|
| 0.112975  | 0.461051 | 0.204075  | 0.592434 |
| 0.84218   | 0.327433 | 0.0399805 | 0.966765 |
| 0.75653   | 0.972319 | 0.331938  | 0.643832 |
| 0.0271157 | 0.135557 | 0.688808  | 0.790602 |

## 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!')
```