

# Markdown to Jupyter notebook example

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

See [PDF of this source](#) if you do not have [excellent Unicode support](#).

$$\begin{aligned}\nabla \times \mathbf{B} - \frac{1}{c} \frac{\partial \mathbf{E}}{\partial t} &= \frac{4\pi}{c} \mathbf{j} \\ \nabla \cdot \mathbf{E} &= 4\pi \rho, \\ \nabla \times \mathbf{E} + \frac{1}{c} \frac{\partial \mathbf{B}}{\partial t} &= \mathbf{0} \\ \nabla \cdot \mathbf{B} &= 0\end{aligned}, \quad (1)$$

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

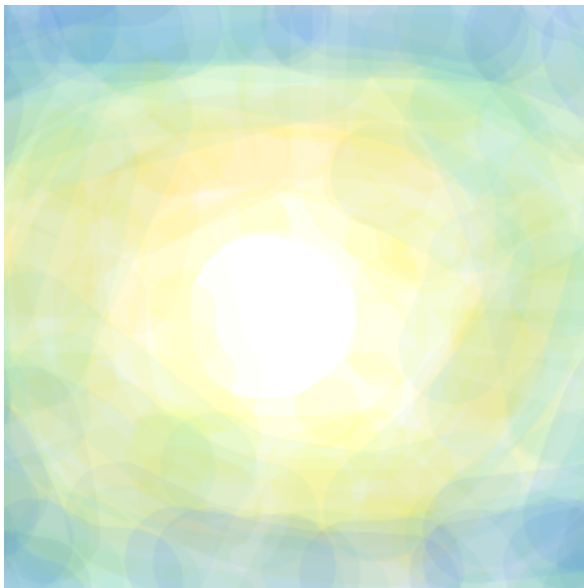


Figure 1: Sample image with cross-references.

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
0.153381	0.400794	0.763807	0.0229349
0.106195	0.570964	0.625615	0.0510774
0.671176	0.0209034	0.0513956	0.772536
0.233313	0.369108	0.0481484	0.522044

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

```
import math
Markdown(f'''
Markdown text with SugarTeX formula:  $\alpha^{\pi \cdot 1.3f}$ $.
It works because of the Markdown display option and
SugarTeX Pandoc filter.
''')
```

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

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