

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

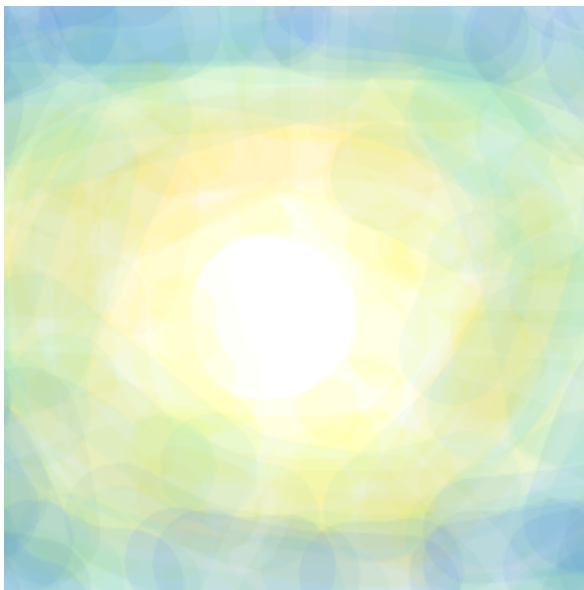


Figure 1: Sample image with cross-references.

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
0.0506294	0.382299	0.258135	0.253375
0.828038	0.65701	0.339948	0.960508
0.870001	0.353072	0.687555	0.557769
0.436808	0.100956	0.627088	0.901765

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:  $\alpha^{\pi:1.3f}$ $.
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!')
```