# Great title for a great paper

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### 1 A bit of lorem ipsum

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### 1 A bit of lorem ipsum

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## 2 Table fun

Table 2.1: Test table with fancy colors  $\,$ 

Row 1	Row 2	Row 3
Item 1	Item 2	Item 3
$\underline{\text{Item } 4}$	Item 5	Item 6

That table 2.1 is great!

### 3 Picturing it

No more floating problems with [H]!

# TEST PHOTO PLEASE EXCUSE US

With [H] it's really "here"! And there's a test cite<sup>1</sup>

<sup>&</sup>lt;sup>1</sup>IEE09.

### 4 Minted

Python code example:

```
import numpy as np
    def incmatrix(genl1,genl2):
        m = len(genl1)
4
        n = len(gen12)
5
        M = None #to become the incidence matrix
        VT = np.zeros((n*m,1), int) #dummy variable
        #compute the bitwise xor matrix
        M1 = bitxormatrix(genl1)
10
        M2 = np.triu(bitxormatrix(genl2),1)
11
12
        for i in range(m-1):
13
            for j in range(i+1, m):
14
                [r,c] = np.where(M2 == M1[i,j])
15
                for k in range(len(r)):
                    VT[(i)*n + r[k]] = 1;
17
                    VT[(i)*n + c[k]] = 1;
18
                    VT[(j)*n + r[k]] = 1;
                    VT[(j)*n + c[k]] = 1;
20
21
                    if M is None:
                        M = np.copy(VT)
23
                    else:
24
                        M = np.concatenate((M, VT), 1)
26
                    VT = np.zeros((n*m,1), int)
27
29
        return M
```

### 5 Math is always fun

```
Let k_i be a stochastic transition kernel from (\times_{j=0}^{i-1}\Omega_j, \times_{j=0}^{i-1}\mathcal{A}_j) to (\Omega_i, \mathcal{A}_i). \times_{j=0}^{i-1}\Omega_j is for the cartesian product, \times_{j=0}^{i-1}\mathcal{A}_j is for the product of sigma-algebras. Let's define the probability measures P_i = P_0 \otimes \bigotimes_{j=1}^i k_j on (\times_{j=0}^i \Omega_j, \times_{j=0}^i \mathcal{A}_j). Then why do we have that P_i(A \times \Omega_{k+1} \cdots \times \Omega_i) = P_j(A \times \Omega_{k+1} \cdots \times \Omega_j), for any A \in \times_{j=0}^k \mathcal{A}_j with j, i \geq k?
```

# **Bibliography**

 $[IEE09] \quad IEEE. \it IEEE \it Citation \it Guide. http://www.ieee.org/documents/ieeecitationref. \\ pdf. Sept. 2009.$