



FULL TITLE OF THE REPORT

Month 2023

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Name of the Author

XYZ Competence Centre etc.

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PROJECT SPECIFICATION



Your Project Specification goes here.





ABSTRACT

Abstract of your Report.



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1 INTRODUCTION

Hello world! If you are one of those exceptional minds that don't like to use Word, please be welcome and use this L^AT_EXtemplate for your project report! A preview of you face in this exact moment is presented in Figure 1.



Figure 1: Example of a figure from Ref. [2]

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A. MORE

More information is available for instance at https://www.overleaf.com/learn/latex/Inserting_Images.

B. EVEN MORE

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i. More more, maybe?

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ii. This is really the last one

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2 MORE BUT BIGGER

Another section. Custom environment `longlisting` used in Listing 1 enables page breaks within the code snippet.

A. ABOUT LISTINGS

More information on code snippets is available for instance at:

- https://www.overleaf.com/learn/latex/Code_Highlighting_with_minted,
- [minted package documentation](#).

```
import numpy as np

def incmatrix(genl1,genl2):
    m = len(genl1)
    n = len(genl2)
    M = None #to become the incidence matrix
    VT = np.zeros((n*m,1), int) #dummy variable

    #compute the bitwise xor matrix
    M1 = bitxormatrix(genl1)
    M2 = np.triu(bitxormatrix(genl2),1)

    for i in range(m-1):
        for j in range(i+1, m):
            [r,c] = np.where(M2 == M1[i,j])
            for k in range(len(r)):
                VT[(i)*n + r[k]] = 1;
                VT[(i)*n + c[k]] = 1;
                VT[(j)*n + r[k]] = 1;
                VT[(j)*n + c[k]] = 1;
```



```

if M is None:
    M = np.copy(VT)
else:
    M = np.concatenate((M, VT), 1)

VT = np.zeros((n*m,1), int)

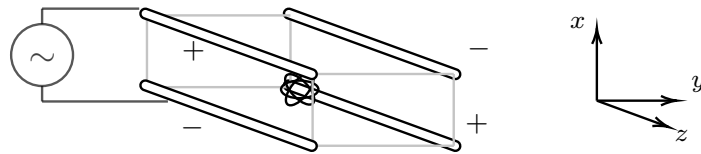
return M

```

Listing 1: Example code snippet [1]. `minted` package is required to compile it.

B. USE LATEX BEAUTIFUL FEATURES

Unlike Word, you can do very fancy stuff with \LaTeX . Please enjoy a vector sketch of a Paul trap...



... or this stunning Lindblad equation

$$\dot{\rho} = \frac{i}{\hbar}[\rho, H] + \sum_j \gamma_j \left(L_j \rho L_j^\dagger - \frac{1}{2} \{ L_j^\dagger L_j, \rho \} \right) \quad (1)$$

REFERENCES

- [1] Dummy author. *Some title*. URL: https://www.overleaf.com/learn/latex/Code_Highlighting_with_minted (visited on 09/30/2010).
- [2] Yourself. “Your face”. In: *Journal 1* (2023). DOI: [10.X/](https://doi.org/10.X/).

More information on bibliography is available for instance at https://www.overleaf.com/learn/latex/Bibliography_management_with_biblatex.