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# TITLE OF THE REPORT

SUBTITLE

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A PREPRINT

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## ABSTRACT

This is the abstract of the report. It can span multiple lines.

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## 1 Introduction

### 1.1 First subsection

References: Scholl et al. (2022) showed that XXX (Vitay, 2017).

See Figure 1 and Section 3.

Equations:

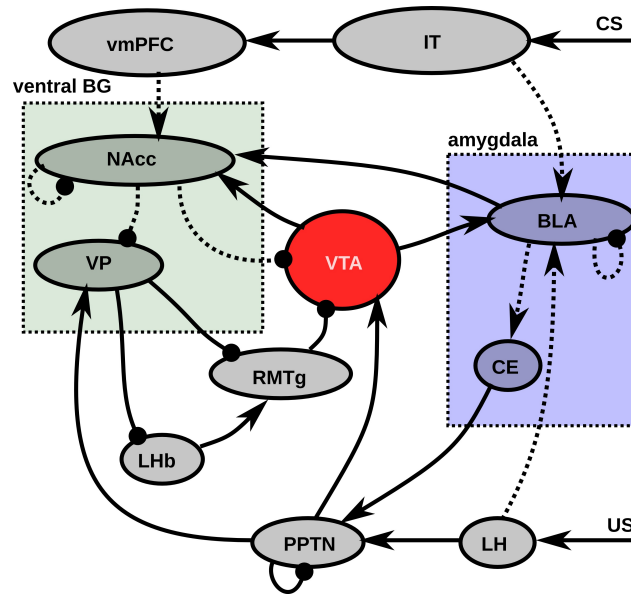


Figure 1: Afferent system to VTA. (Vitay, 2017)

$$\tau \frac{dx_j(t)}{dt} + x_j(t) = \sum_i w_{ij}^{in} r_i^{in}(t) + g \sum_{i \neq j} w_{ij}^{rec} r_i(t)$$

Admonitions:

**i** Nota Bene

Important information.

Code snippets:

```
for i in range(10):
    print(i)
```

## 1.2 Second subsection

[https://www.youtube.com/embed/tPgF\\_btFfc](https://www.youtube.com/embed/tPgF_btFfc)

## **2 Material and methods**

## **3 Results**

## **4 Discussion**

## **References**

Scholl, C., Baladron, J., Vitay, J., and Hamker, F. H. (2022). Enhanced habit formation in Tourette patients explained by shortcut modulation in a hierarchical cortico-basal ganglia model. *Brain Structure and Function*. doi:[10.1007/s00429-021-02446-x](https://doi.org/10.1007/s00429-021-02446-x).

Vitay, J. (2017). On the role of dopamine in motivated behavior: A neuro-computational approach. Available at: <https://julien-vitay.net/publication/vitay2017/>.