Title of the report

Subtitle

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2024-02-28

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

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1 Introduction

1.1 First subsection

The Basal Ganglia (BG) are a set of nuclei located in the basal forebrain, receiving inputs mostly from the cerebral cortex and projecting to various motor centers, as well as back to the cortex through the thalamus, forming a closed-loop. It is involved in major functions such as reinforcement learning, habit formation, planning and motor control, but also in diseases such as Parkinson's disease or Tourette syndrome.

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

See Figure 1 and Section 3.

Equations:

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

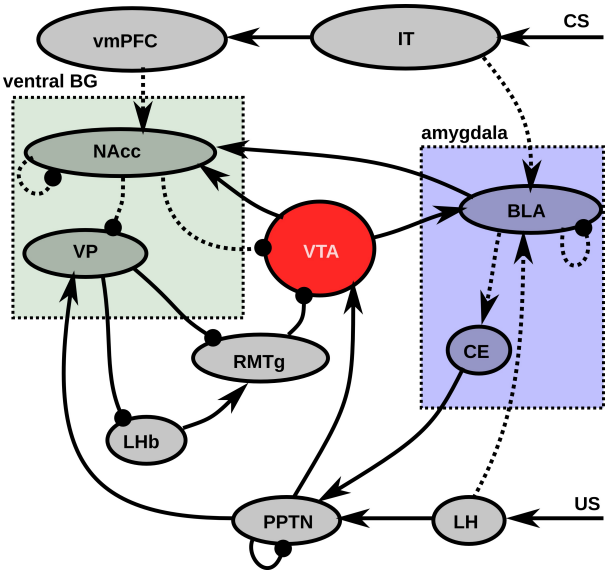

Figure 1: Afferent system to VTA. (Vitay, 2017)

Ad monitions:

> **Nota Bene**
>
> Important information.

Code snippets:

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

1.2 Second subsection

https://www.youtube.com/embed/tPgf_btTFlc

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.

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