

## exp\_MZ

June 5, 2023

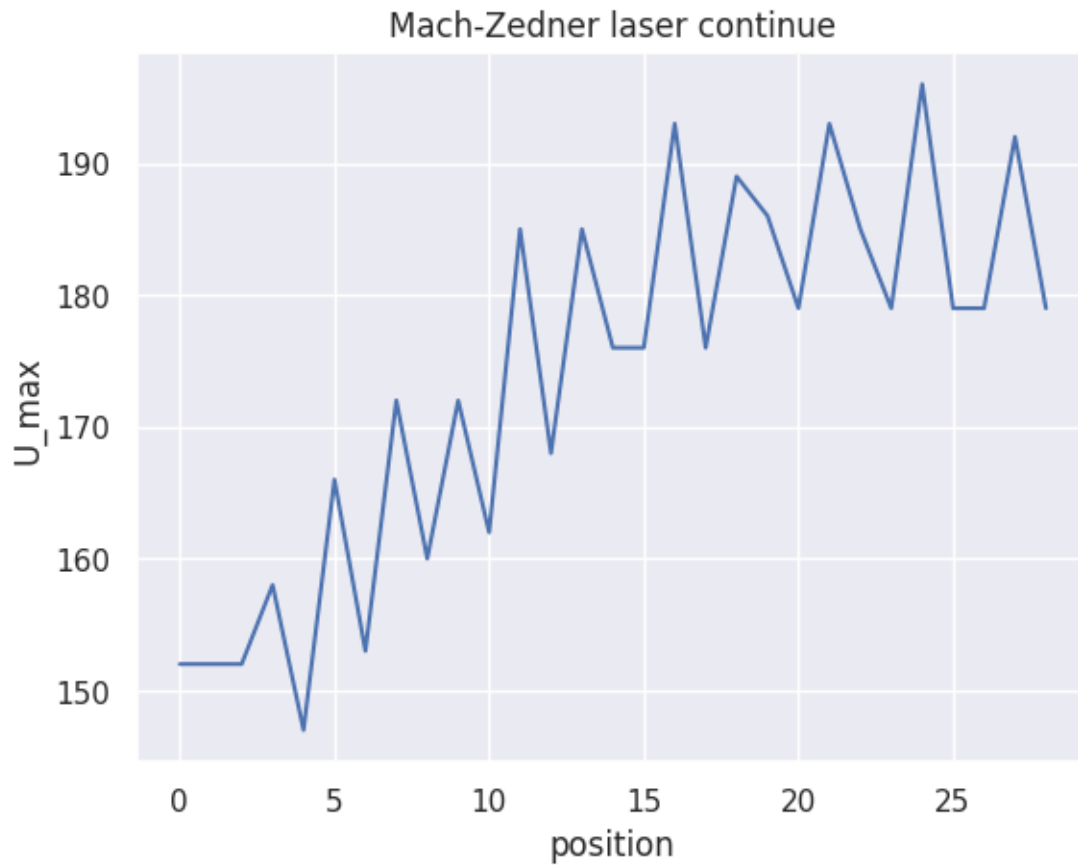
```
[ ]: import pandas as pd
import numpy as np
import matplotlib.pyplot as plt
import seaborn as sn
```

```
[ ]: MZ_data = pd.read_csv('data_HeNe_MZ.csv')
```

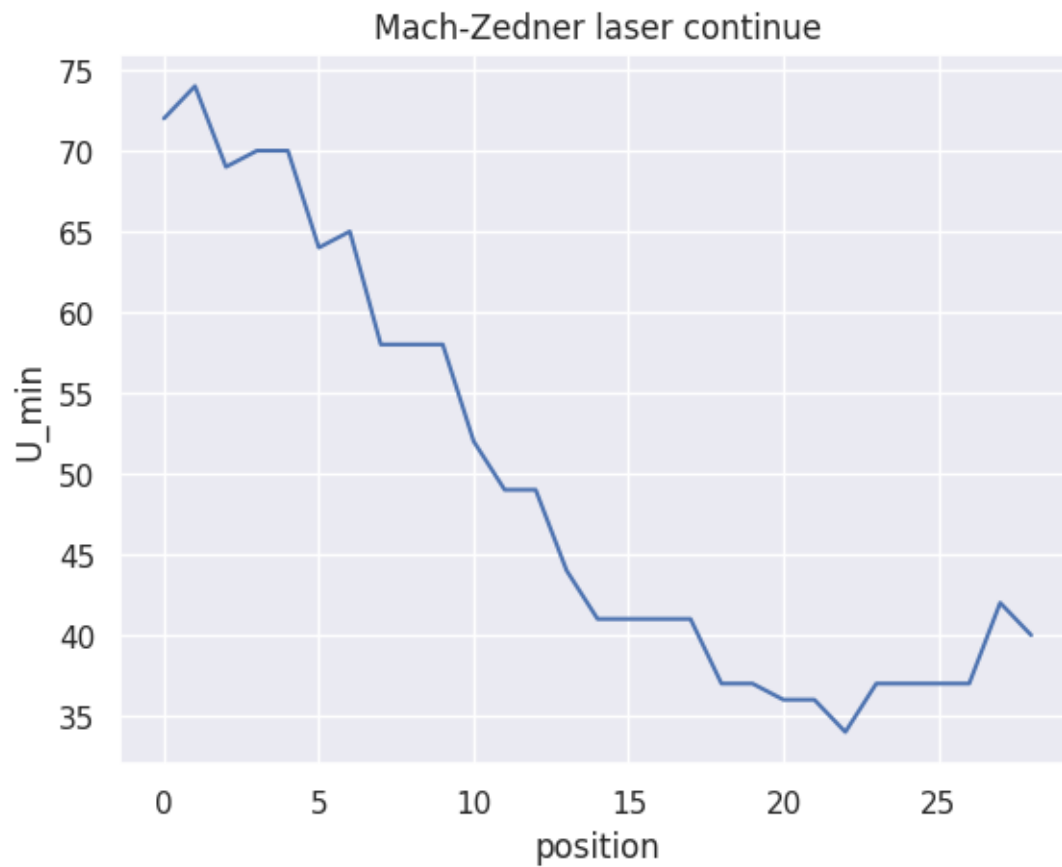
```
[ ]: x = MZ_data['x']
U_max = MZ_data['Umax']
U_min = MZ_data['Umin']
```

```
[ ]: n = 1

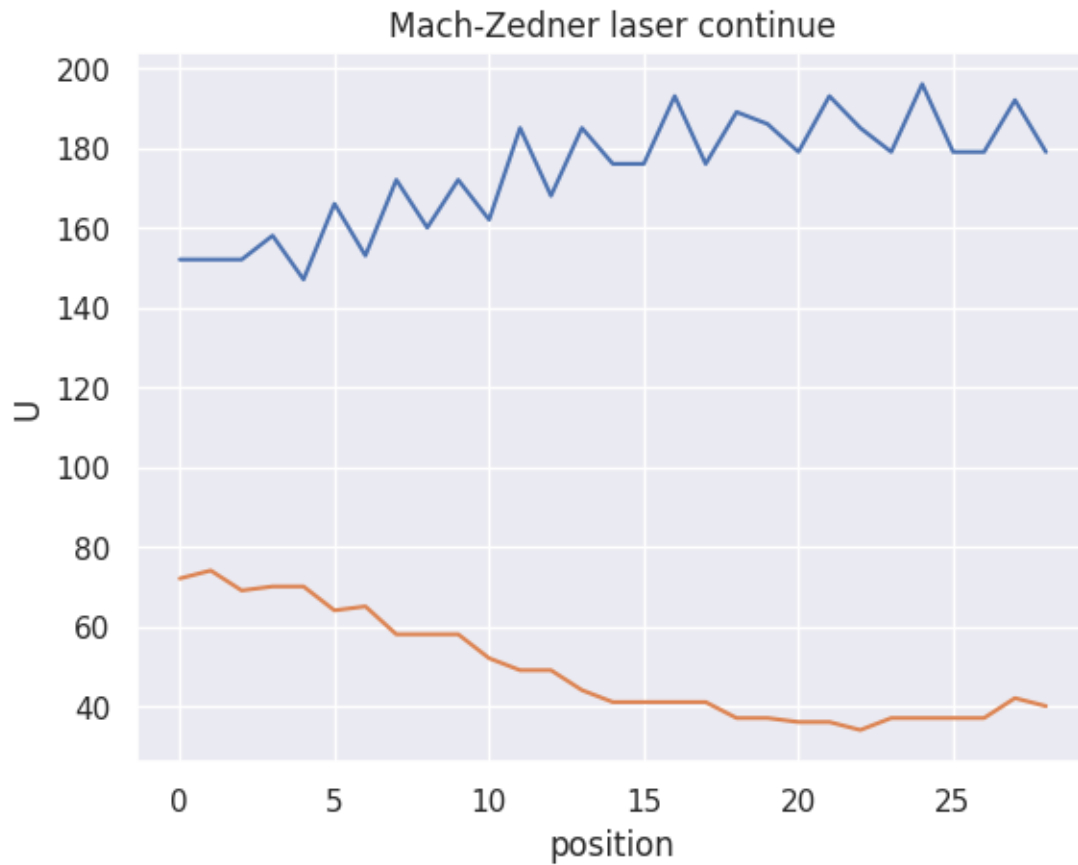
sn.set()
plt.figure(n)
plt.plot(x, U_max)
plt.title('Mach-Zedner laser continue')
plt.xlabel('position')
plt.ylabel('U_max')
plt.show()
sn.set_style("white")
n=n+1
```



```
[ ]: sn.set()
plt.figure(n)
plt.plot(x, U_min)
plt.title('Mach-Zedner laser continue')
plt.xlabel('position')
plt.ylabel('U_min')
plt.show()
sn.set_style("white")
n=n+1
```

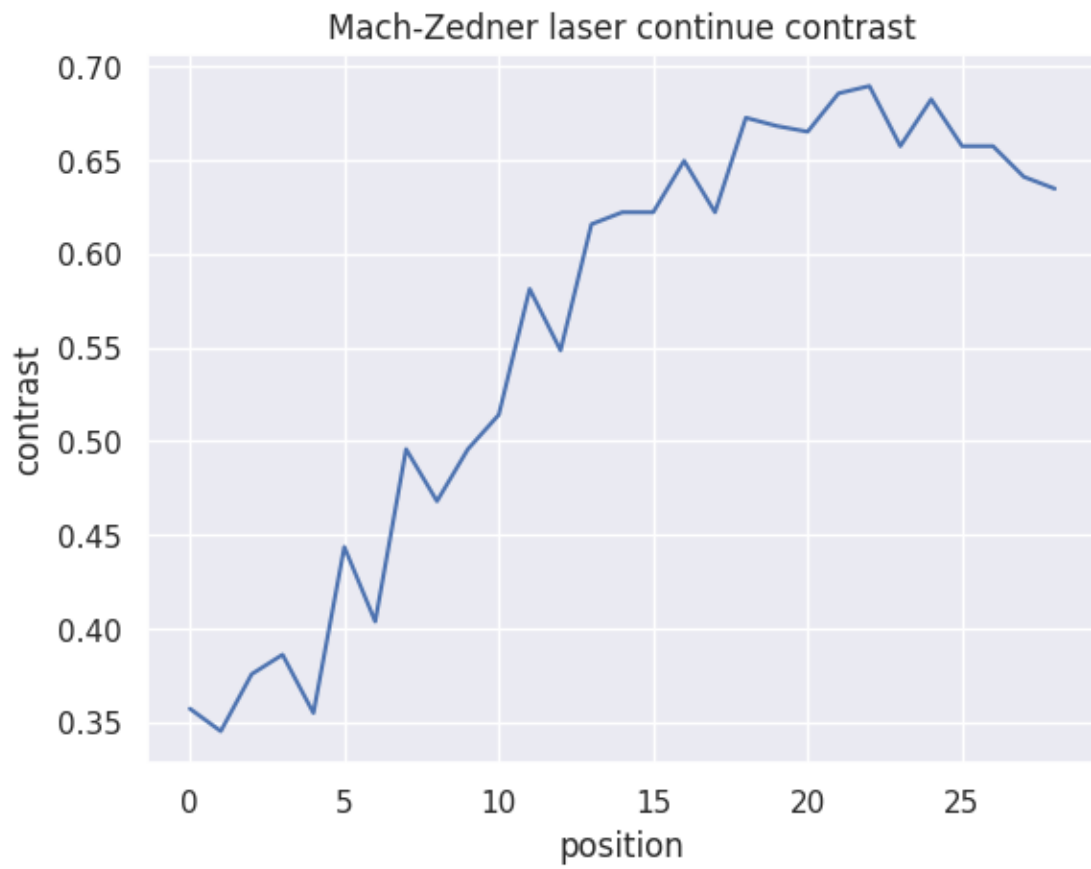


```
[ ]: sn.set()
plt.figure(n)
plt.plot(x, U_max)
plt.plot(x, U_min)
plt.title('Mach-Zedner laser continue')
plt.xlabel('position')
plt.ylabel('U')
plt.show()
sn.set_style("white")
n=n+1
```



```
[ ]: contrast_cont = (U_max - U_min)/(U_max + U_min)
```

```
[ ]: sn.set()
plt.figure(n)
plt.plot(x, contrast_cont)
plt.title('Mach-Zedner laser continue contrast')
plt.xlabel('position')
plt.ylabel('contrast')
plt.show()
sn.set_style("white")
n=n+1
```



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