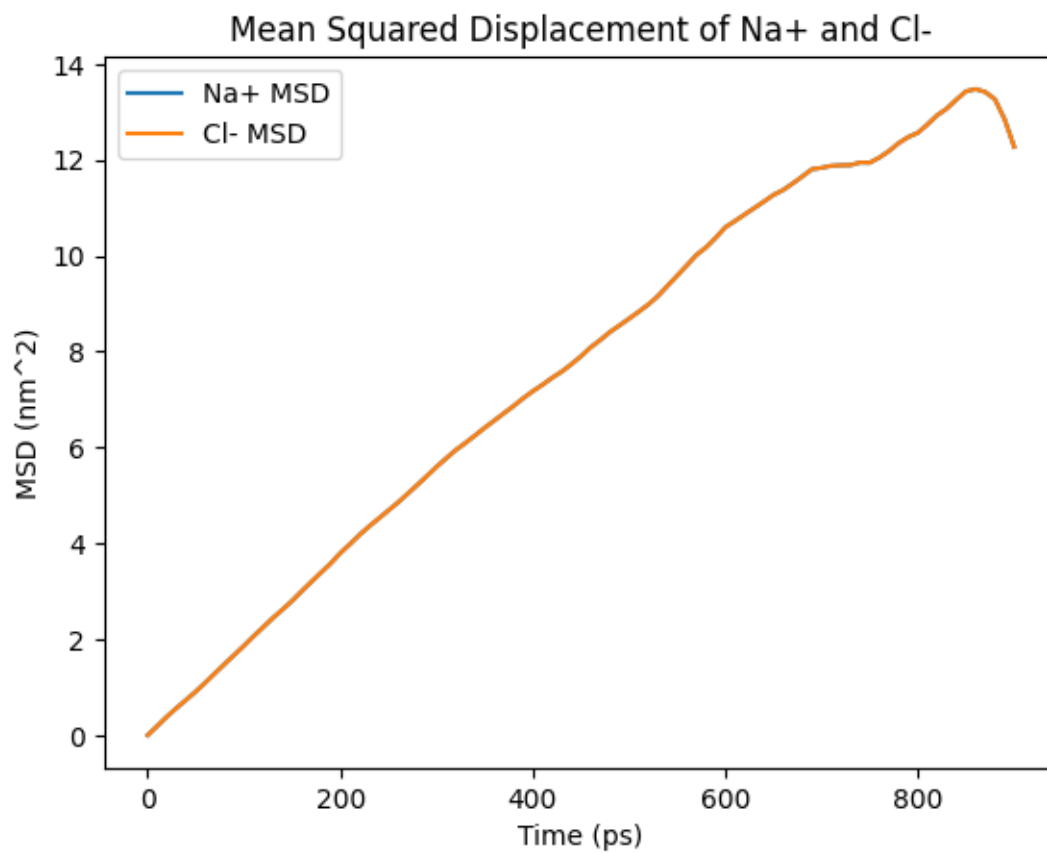# MSD_NaCl

October 3, 2024

```python
[1]: import matplotlib.pyplot as plt
     import numpy as np

     #   Na+   Cl-   MSD
     time_na, msd_na = np.loadtxt("msd_na.xvg", comments=["@", "#"], unpack=True)
     time_cl, msd_cl = np.loadtxt("msd_cl.xvg", comments=["@", "#"], unpack=True)

     #   MSD
     plt.plot(time_na, msd_na, label='Na+ MSD')
     plt.plot(time_cl, msd_cl, label='Cl- MSD')
     plt.xlabel('Time (ps)')
     plt.ylabel('MSD (nm^2)')
     plt.title('Mean Squared Displacement of Na+ and Cl-')
     plt.legend()
     plt.savefig('msd_na_cl_plot.png')
     plt.show()
```

Mean Squared Displacement of Na+ and Cl-

[ ]: