Summer Research 2022 with Prof Lin and Prof Sormani

Public webpage is here: (includes prep info)

https://sites.google.com/site/professorsormani/home/eigenmaps-and-manifold-learning

Code .mlx files are in the shared Drive folder:
https://drive.google.com/drive/folders/17YcUUp7ubt1dwcB13EtphQ3bAw1zZf0d?usp=sharing

Private weekly notes for the team only: (request access when following the link)

Recruitment event video: (about eigenmaps)
https://lehman-cuny-edu.zoom.us/rec/share/T_FGz8pVztvUgbZXtC_K4aO1FK10o-A_cRrOLKR
53K0rVzMBPMHOwdDvG2fydVqW.Y0c5zBqzHxbwniC_
Passcode: m#u=d7GS

Summer Team has been studying
Kuratowski Maps

EMAPS22-Week1 June 21- June 26

EMAPS22-Week2 June 27- July 4

EMAPS22-Week3 July 5 - July 11

EMAPS22-Week4 July 12 - July 18

EMAPS22-Week5 July 19 - July 25

EMAPS22-Week6 July 26 - August 1

EMAPS22-Week7 August 2-August 8

EMAPS22-Week8 August 9-August 16

No meeting Week 9 August 17-August 22

EMAPS22-Week10 August 23-August 29

EMAPS22-Week11 August 30-September 6

Final Projects:

Karla: MATLAB images under Kuratowski maps of various curves with arclength distance, observed they are line segments between basepoints, and proved this.

Tabitha: MATLAB images under Kuratowski maps of various curves with Euclidean distances, observed they are smooth away from basepoints, proved this.

Alex: MATLAB code to choose best basepoints to achieve an almost distance preserving map, including thorough check of all basepoints, as well as random checks,