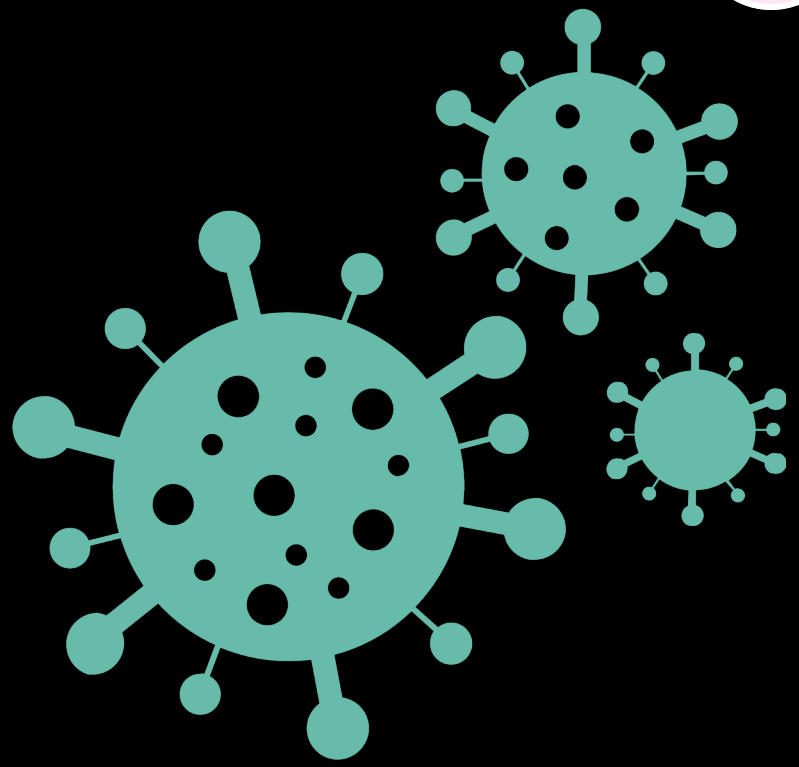


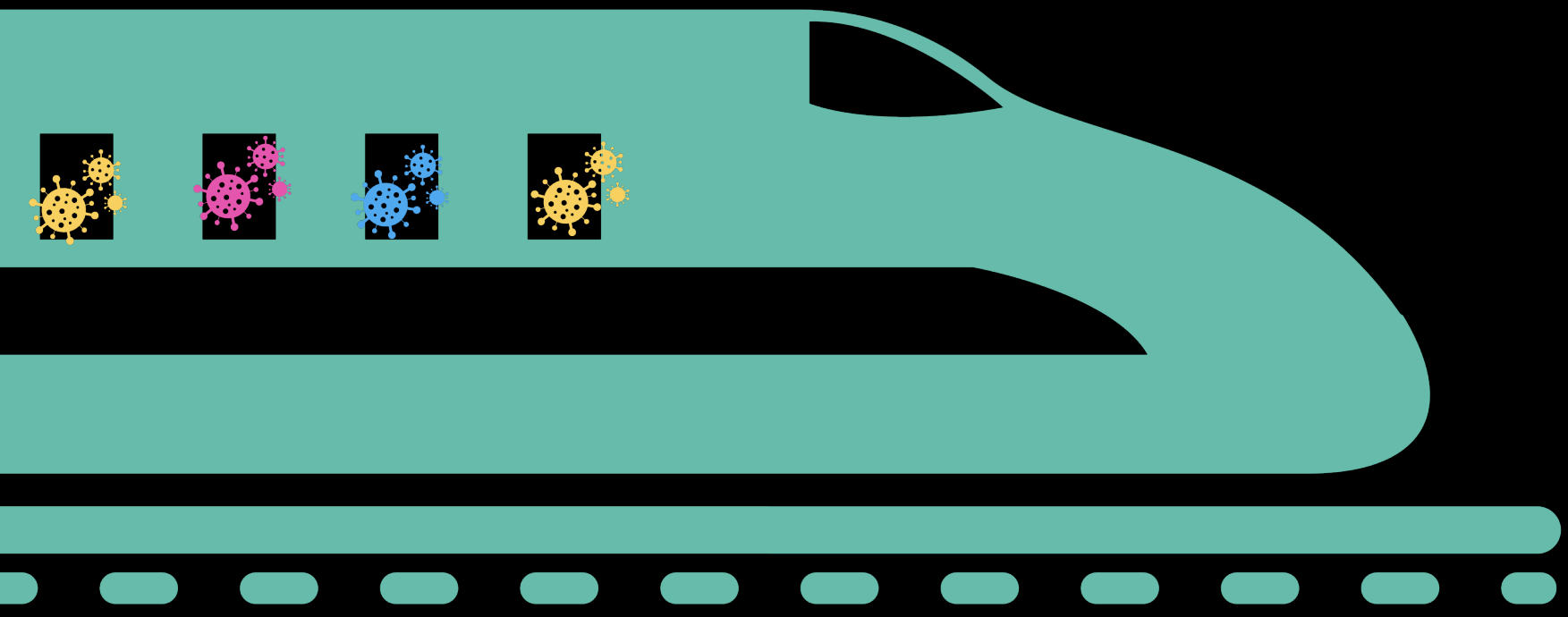
DS II SEMINAR

MARCEL OCHSENDORF

INITIAL PRESENTATION

RESEARCH QUESTION

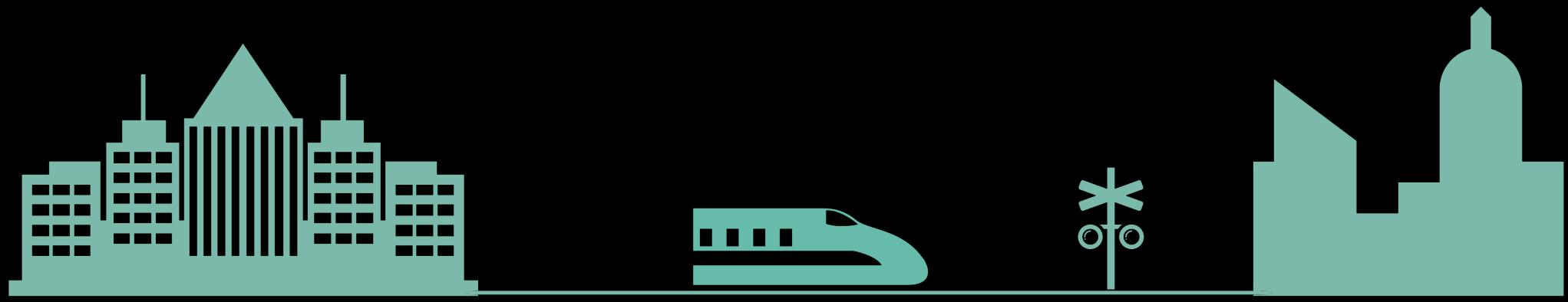
IS IT POSSIBLE TO IDENTIFY A CORRELATION BETWEEN CORONA CASES IN SMALL LOCAL COMMUNITIES AND PUBLIC TRANSPORTATION SERVICE?*



* ASSUMING 100% RAILWAY TRAFFIC [NO CARS,...]

THEORETICAL EXAMPLE

MARCH 2020



NÜRNBERG

111 CORONA CASES

RE10 <=>24TIMES/DAY

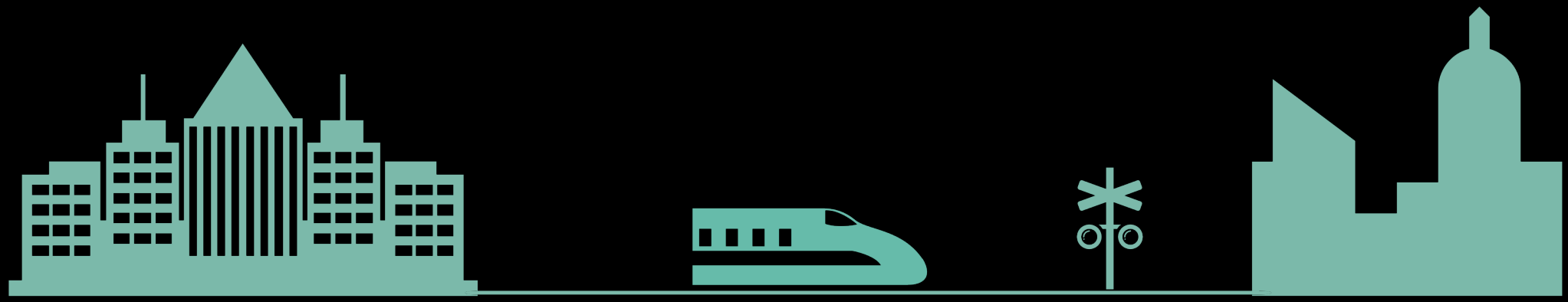
APPROX 30
PASSENGERS/RIDE

EMSKIRCHEN

7 CORONA CASES

THEORETICAL EXAMPLE

NOVEMBER 2020



NÜRNBERG

768 CORONA CASES

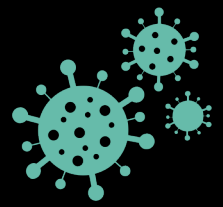
RE10 <=>24TIMES/DAY

EMSKIRCHEN

20 CORONA CASES

IS IT POSSIBLE TO FIND OUT RAILROAD CONNECTIONS THROUGH WHICH THE CORONA VIRUS SPREAD?

DATA



RKI DATASET

[CORONA CASES | COMMUNITIES]

HAVAS | IRIS | DB API

[RAILWAY CONNECTIONS, CAPACITY, FILL RATE, DEPARTURE TABLE]

OVERPASS API

[MAINSTATION LOCATION, COMMUNITIES LOCATION]

TIMELINE

FETCH DB DATA

BUILD MAINSTATION AND DEPATURE DATASET

GENERATE CORONA DATASET FOR SPECIFIED TIMESTAMPS

COMBINE PROCESSED DATA

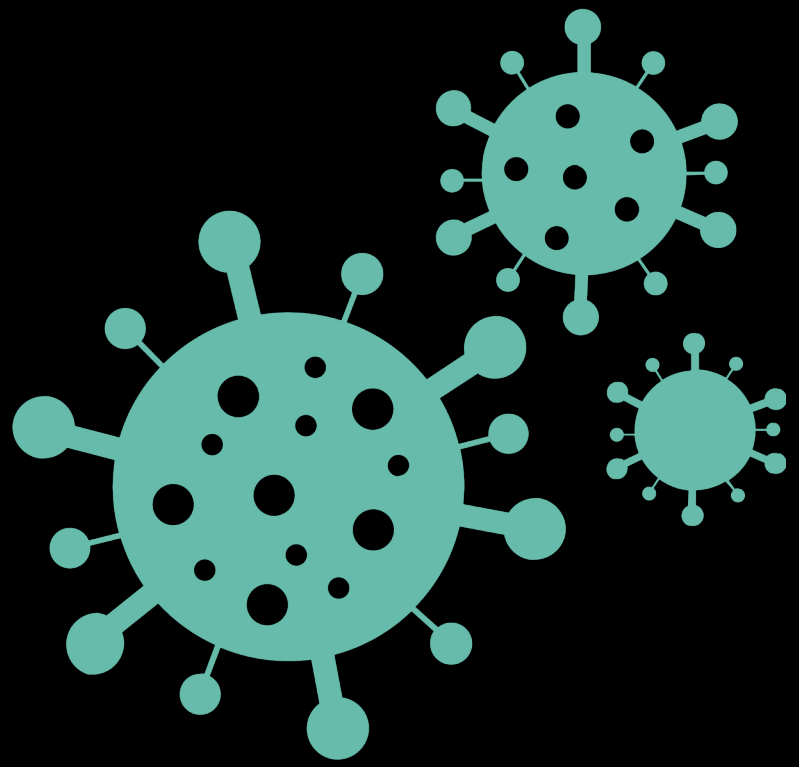
GENERATE HEATMAPS

BUILD AN INTERACTIVE MAP FOR SELECTED CONNECTIONS

INITIAL

INTERMEDIATE

FINAL



QUESTIONS ?