122 objects (0.315 = red <= certainty <= green)

(out-of-sample image)

The *Fundamental Traffic Diagram*

Source: Hendrik Ammoser, Faculty of Transport and Traffic Sciences, Dresden, Germany

Speed change around lane-transitions
(+1.8 km/h on average; +4.1 km/h when moving left from lane>=2)

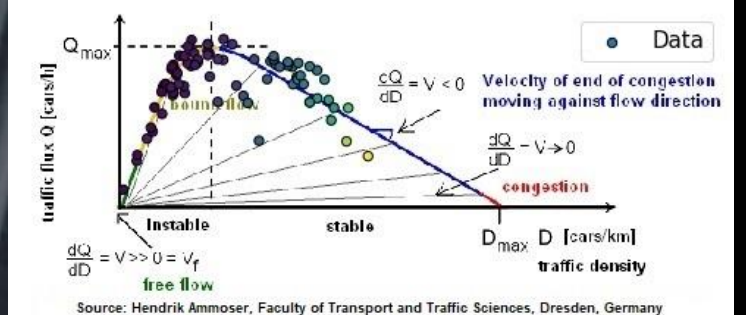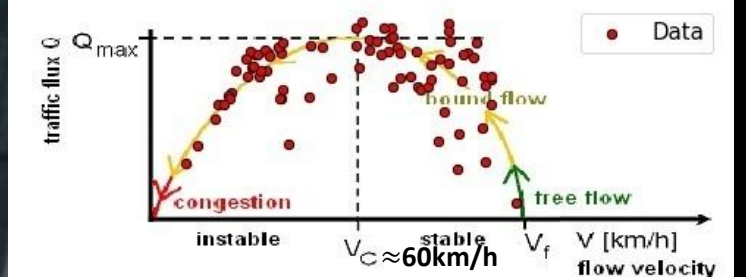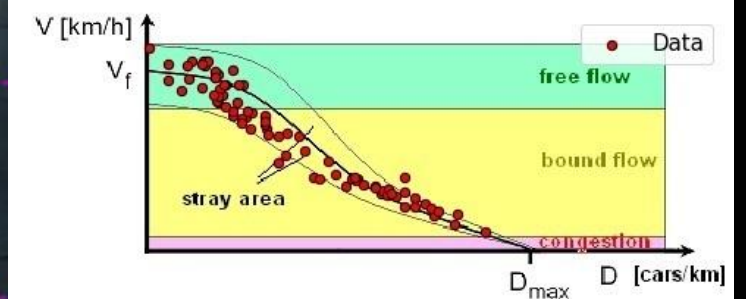## Traffic Analysis in Original Video Data of Ayalon Road

81 8-minute-long videos of Ayalon Road were recorded in May-July 2019 from an apartment window using a personal smartphone camera.

This was followed by processing (see challenges below) and analysis (see examples above and on the left).

Some of the challenges:

- Collecting sufficient **data** in various days & hours
- **Detection** of small, crowded vehicles in various illumination conditions
- **Tracking** over frames in spite of missing detections and low frame-rate
- Non-linear conversion from **pixels to meters**

Ido Greenberg
2019