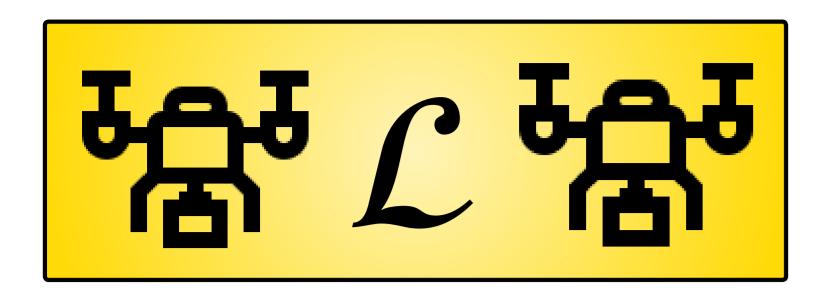
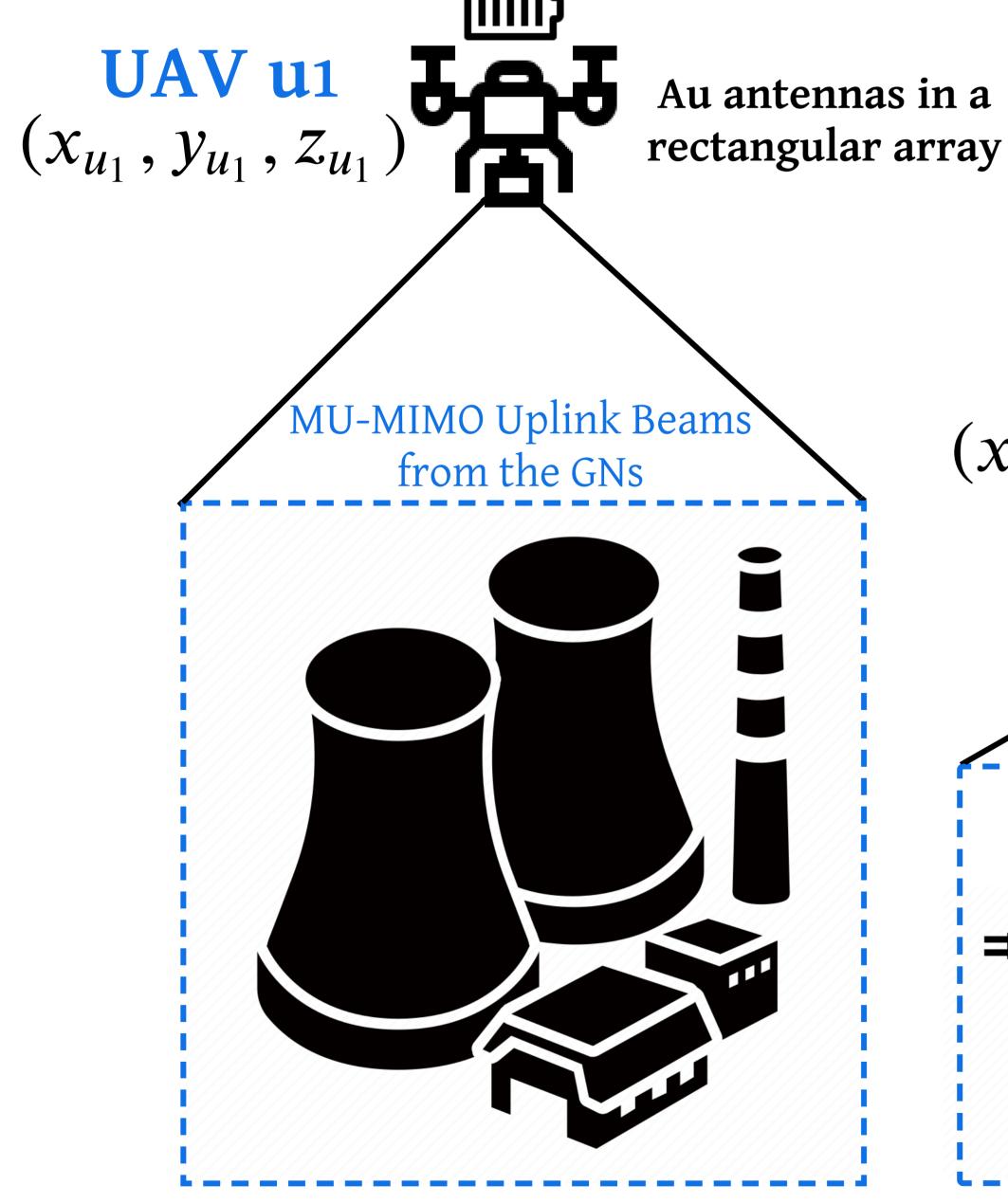
GPS Geo-Fence

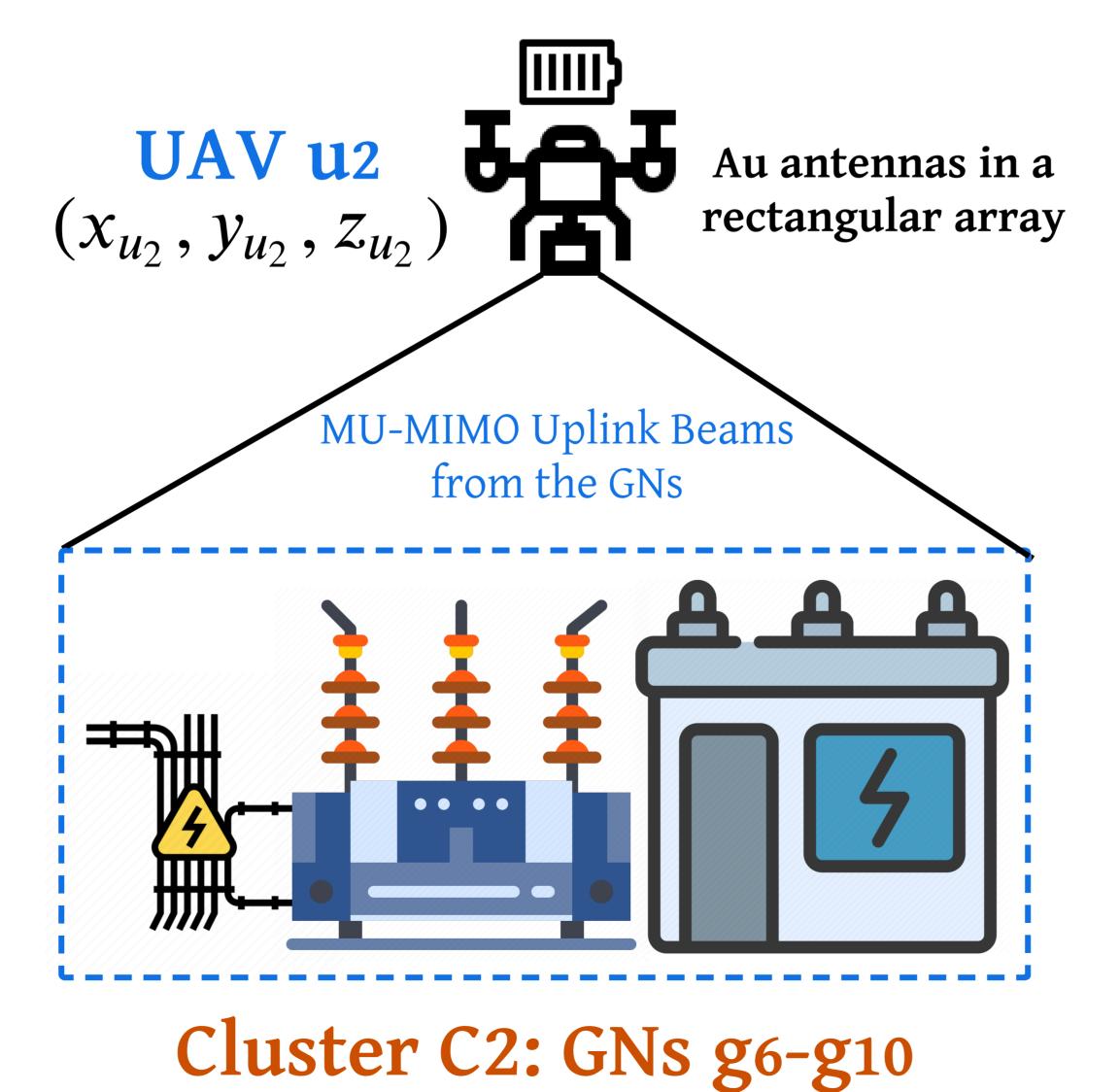


Depot
Takeoff / Landing Pads





Cluster C1: GNs g1-g5
Power Generation Station



Grid Substation

Cluster D2: GNs g16-g20 **Grid Substation** UAV v1 Av antennas in a rectangular array $(x_{v_1}, y_{v_1}, z_{v_1})$ MU-MIMO Uplink Beams from the GNs

Cluster D1: GNs g11-g15

Power Generation Station

MU-MIMO Uplink Beams

from the GNs

 $(x_{v_2}, y_{v_2}, z_{v_2})$

Av antennas in a

rectangular array