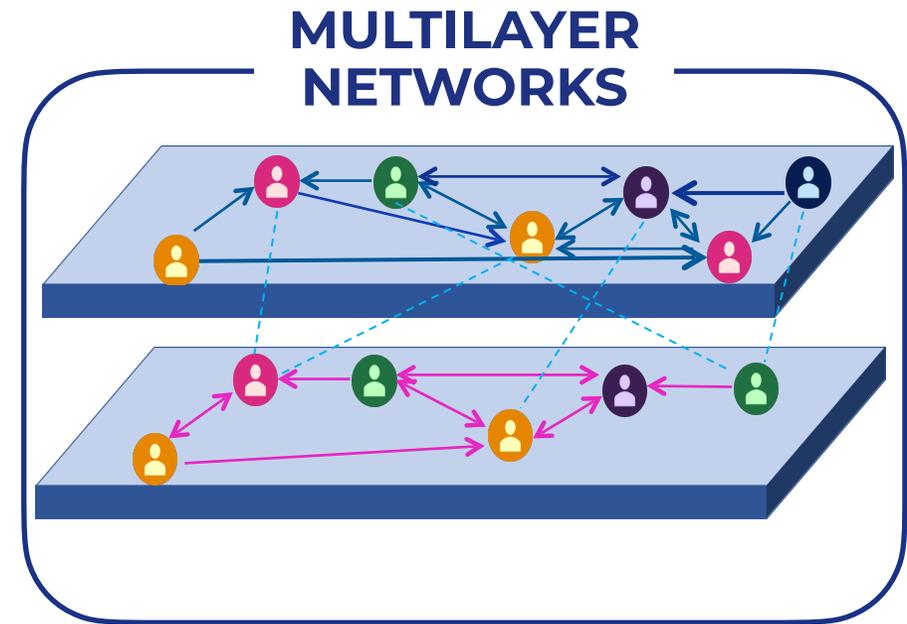
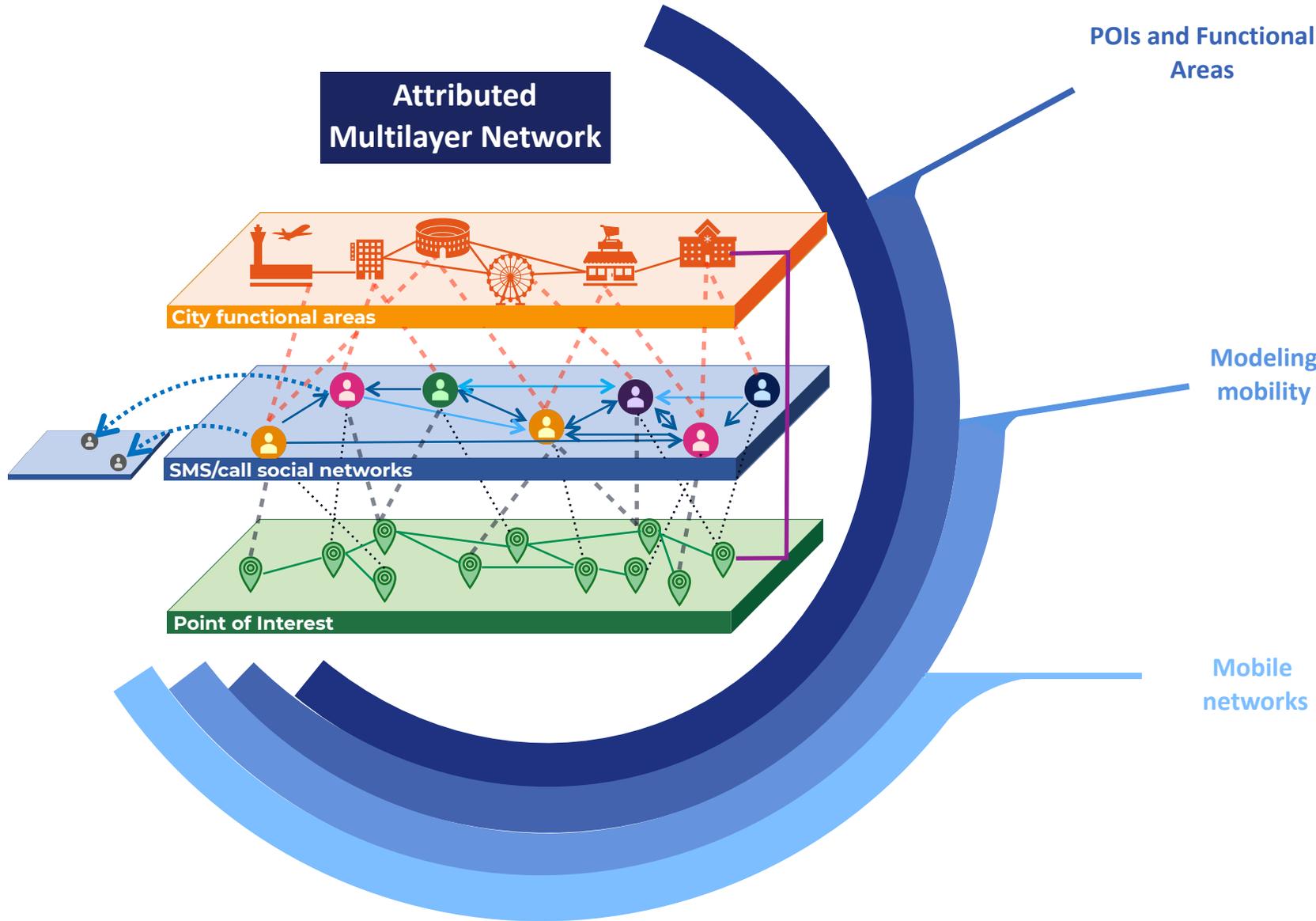


Urban mobility and offline social networks



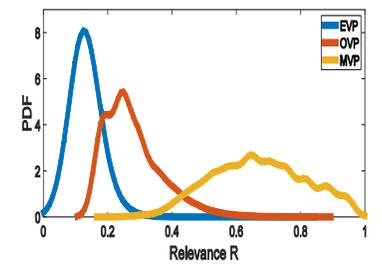
Urban Mobility



**Attributed
Multilayer Network**

POIs and Functional Areas

- POI detection
- POI classification
- FA identification



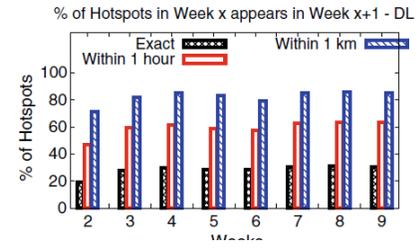
Modeling mobility

- Predictability
- Commutation rules
- Returner or Explorer?
- Mobility model

	Working days		Weekends & Holidays	
# Sequences	14094		2873	
# Users	5925		1761	
Pattern	Sup.(%)	Users(%)	Sup.(%)	Users(%)
(EVP, OVP, HOME)	715 (5.1)	544 (9.2)	-	-
(EVP, WORK, HOME)	749(5.3)	594 (10.0)	-	-
(HOME, EVP, HOME)	2473 (17.5)	1588 (26.8)	980 (34.1)	689 (39.1)
(HOME, WORK, EVP)	777 (5.5)	590 (10.0)	-	-
(OVP, EVP, HOME)	720 (5.1)	570 (9.6)	-	-
(WORK, EVP, HOME)	843 (6.0)	616 (10.4)	-	-
(WORK, OVP, WORK)	785 (5.6)	525 (8.9)	-	-
(EVP, HOME, EVP)	-	-	229 (8.0)	195 (11.1)
(EVP, HOME, MVP)	-	-	158 (5.5)	127 (7.2)
(HOME, MVP, EVP)	-	-	147 (5.1)	123 (7.0)

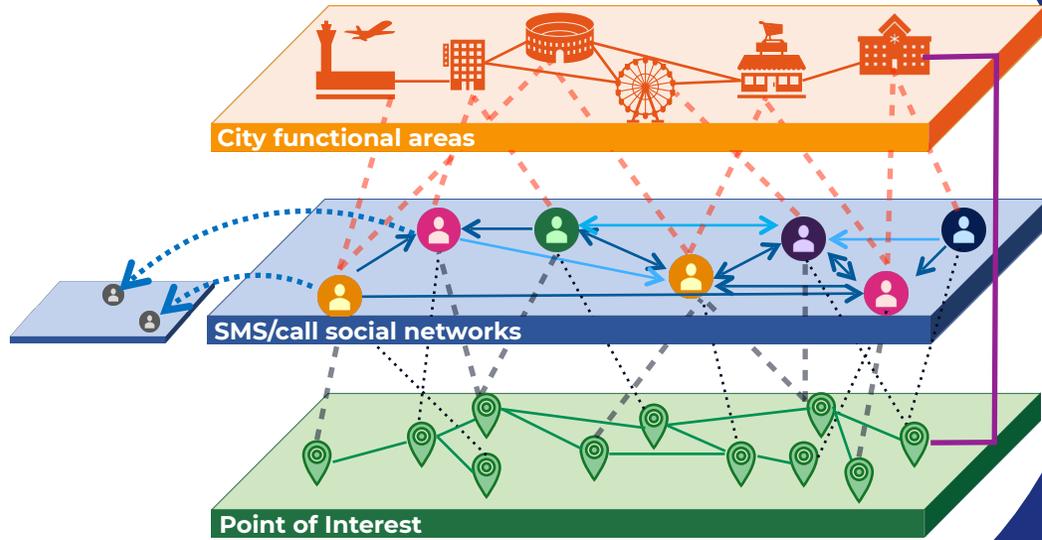
Mobile networks

- Hotspot identification
- Hotspot prediction
- Edge computing



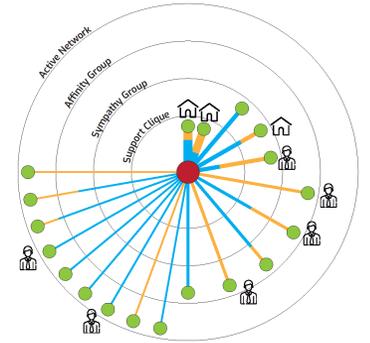
Urban Sociality and Mobility

Attributed
Multilayer Network



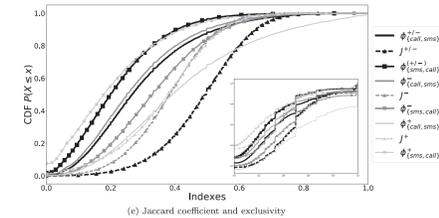
Multilayer social
network
Microscopic level

- Texter or talkers?
- Multireciprocity
- Egonetworks



Multilayer
social
networks

- Multilayer triadic closure
- Multilayer communities
- Urban groups
- Network completion



Mobile
networks

- Opportunistic networks
- Edge computing

