

Laudatio

Dr. Francesc Robusté

Barcelona, 28 de març de 2012

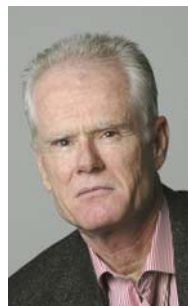


Escola Tècnica Superior d'Enginyers
de Camins, Canals i Ports de Barcelona
UNIVERSITAT POLITÈCNICA DE CATALUNYA



UNIVERSITAT POLITÈCNICA
DE CATALUNYA
BARCELONATECH



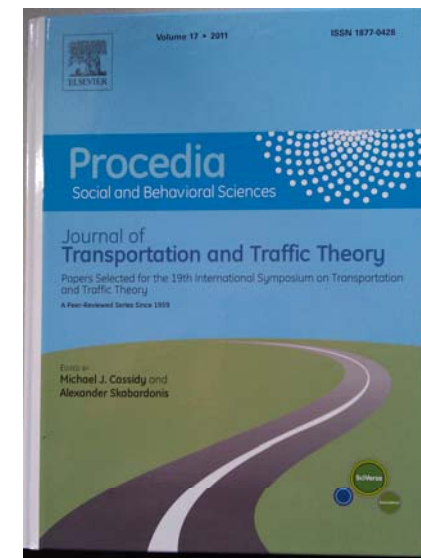
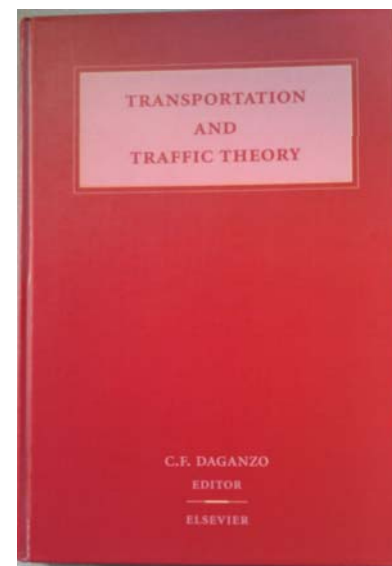
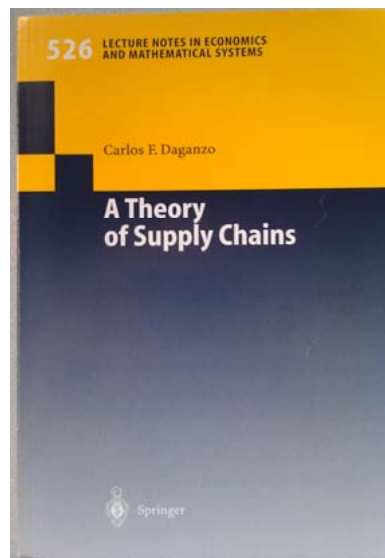
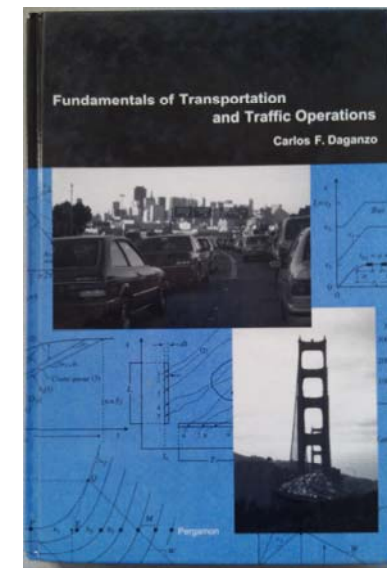
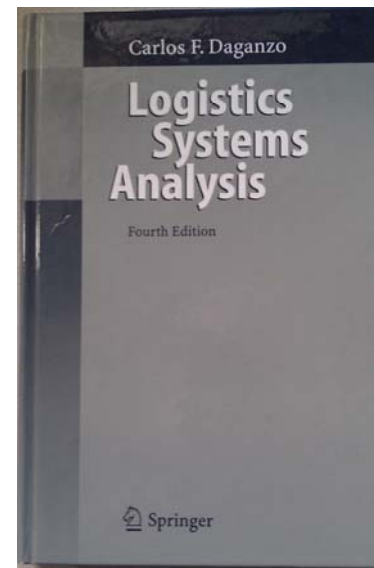
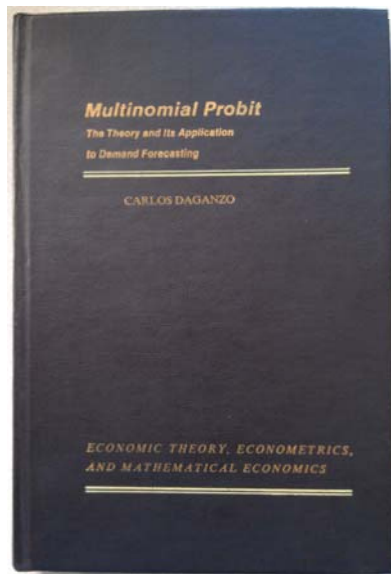


- Catedràtic de Ciència del Transport
- *Robert Horonjeff Professor*, Dept. of Civil and Environmental Engineering
- Director del Centre d'Excel·lència Volvo sobre el Futur del Transport Urbà

Àmbits	Cartes de suport
UPC. BarcelonaTech	25
Catalunya	15
Resta d'Espanya	38
Internacional	29

107





Carlos F. Daganzo, doctor *honoris causa*

Barcelona, 28 de març de 2012

DEMANDA

LOGÍSTICA

TRÀNSIT

TR. PÚBLIC

SCM

FFCC

PORTS

AEROPORTS

TARIFACIÓ

MOBILITAT

DEMANDA

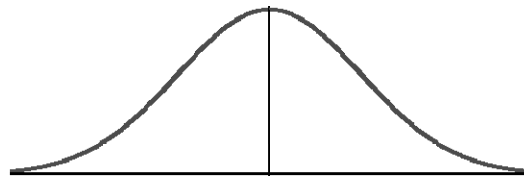
Models *probit* en teoria d'utilitat aleatòria

$$\underbrace{U}_{\text{U. Percebuda (aleatori)}} = \underbrace{V}_{\text{U. Mesurable (determinista)}} + \underbrace{\xi}_{\text{Error (aleatori)}}$$

(per a cada mode de transport i una relació origen-destinació determinades)

Distribució de ξ ? Ha de ser simple i ha de tenir sentit:

$\xi \sim \text{NORMAL} \rightarrow \text{Probit (té sentit)}$



Carlos Daganzo (1979)

$\xi \sim \text{GUMBEL} \rightarrow \text{Logit (és simple)}$



Daniel McFadden (1975)
Premi Nobel d'Economia, 2000



DEMANDA

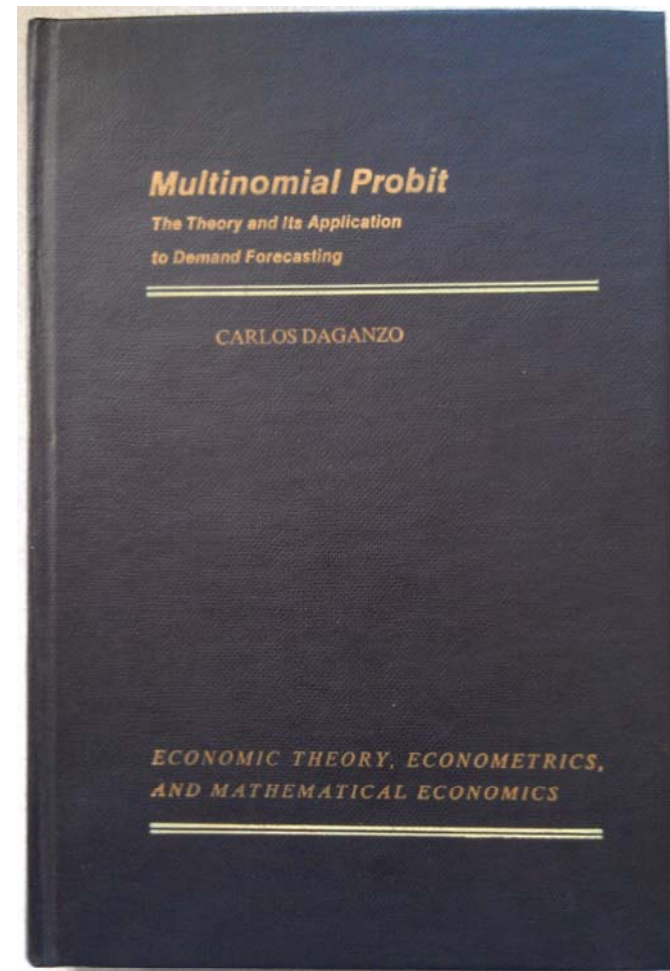
Software de calibració de models de demanda:

-**CHOMP**

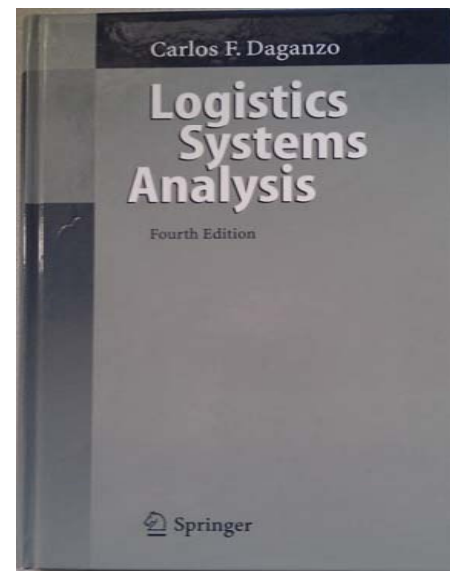
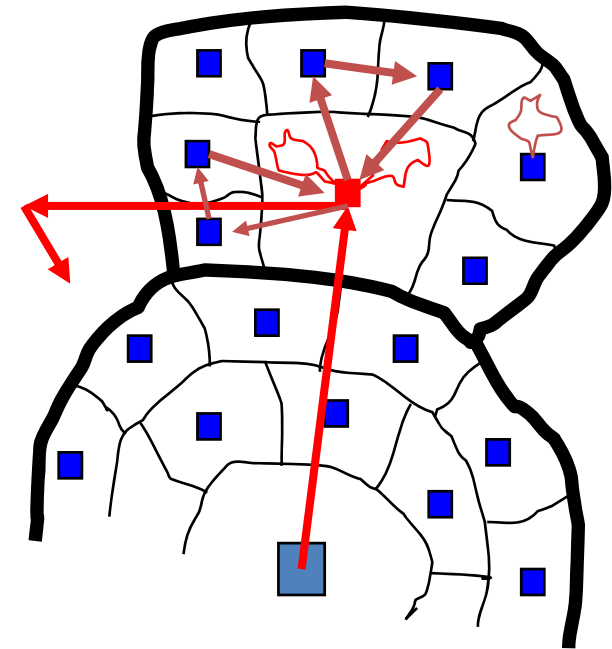
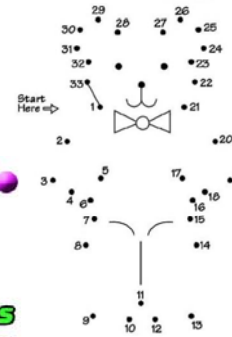
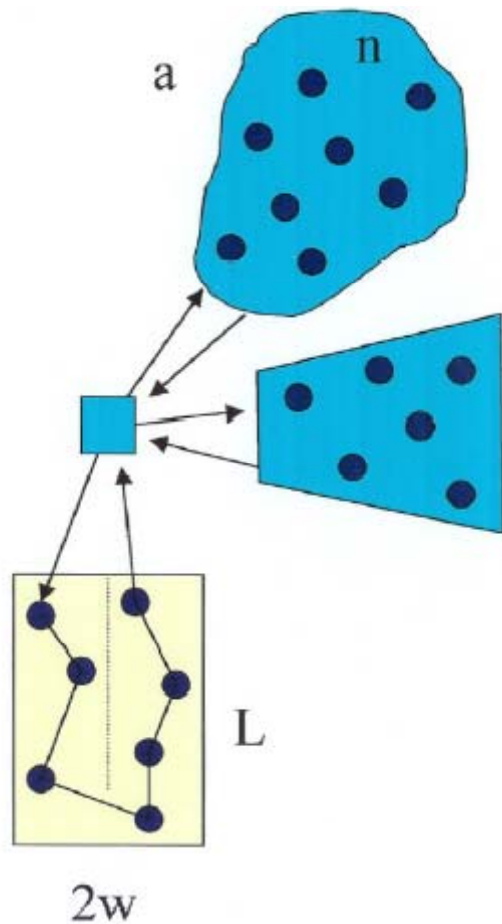
-**TROMP**

-Software d'assignació de trànsit en xarxes amb capacitat finita:

- **PEANUT**



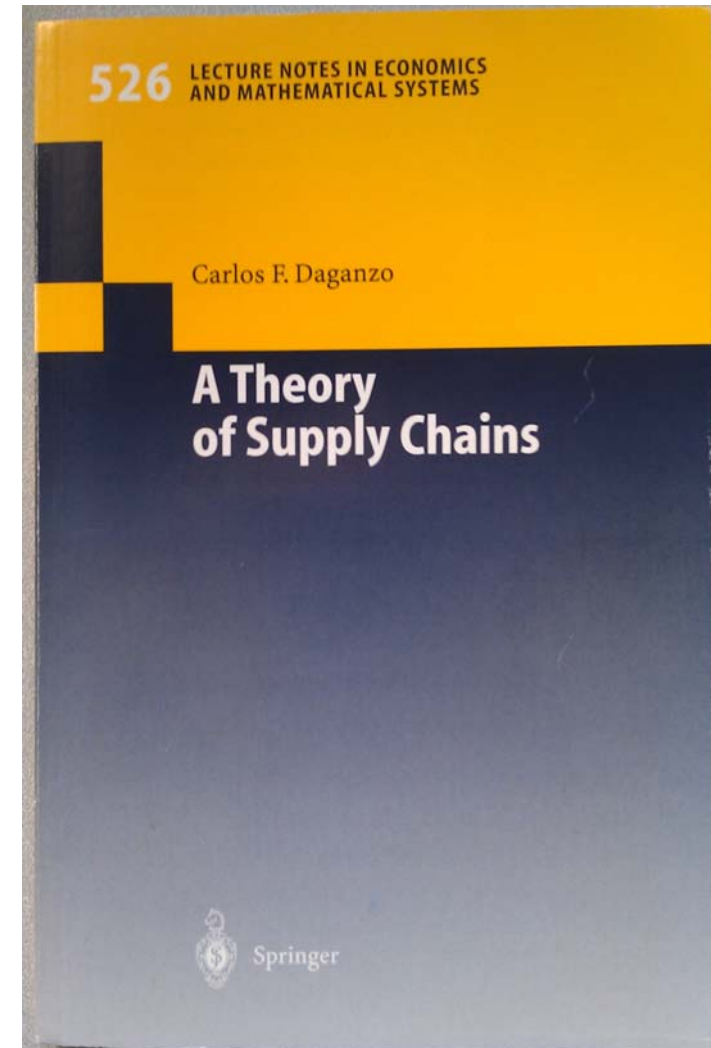
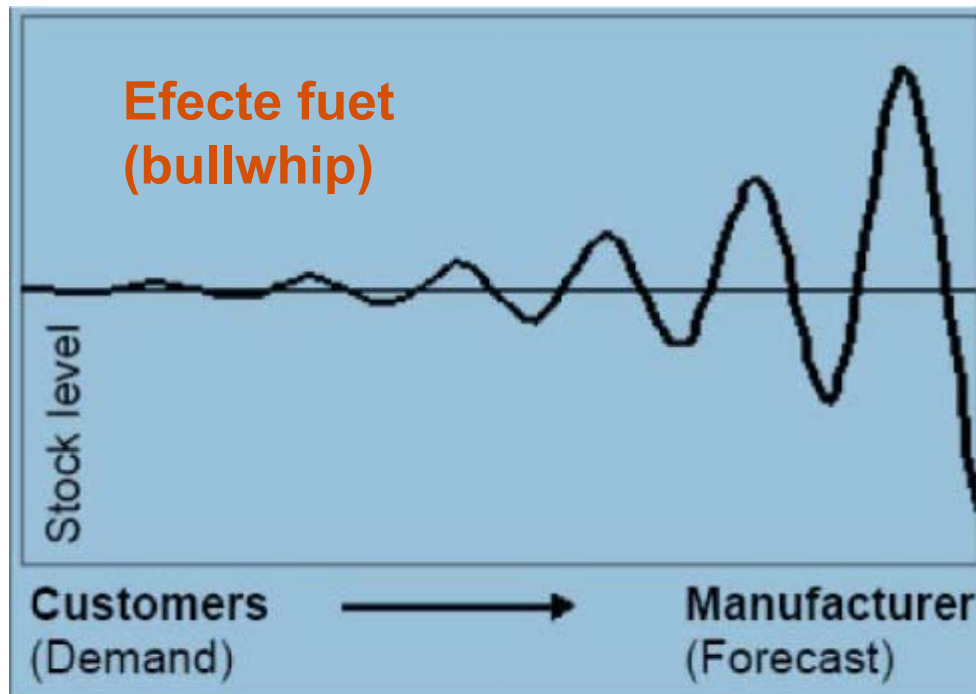
LOGÍSTICA





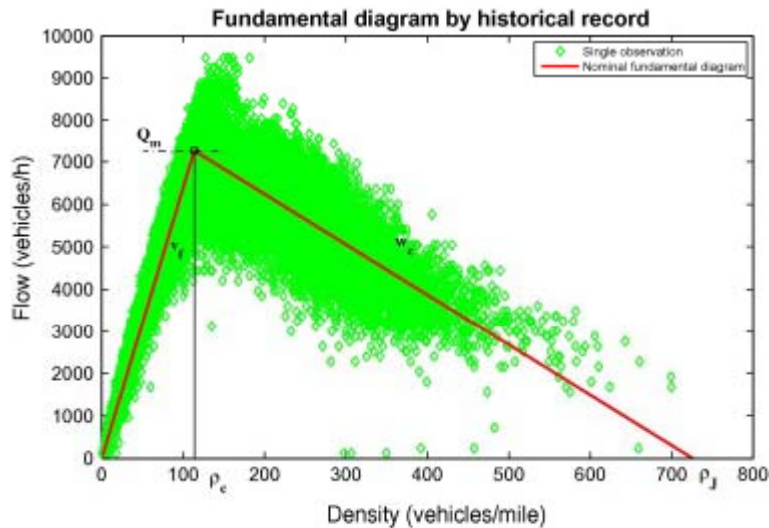
SCM

Supply Chain Management

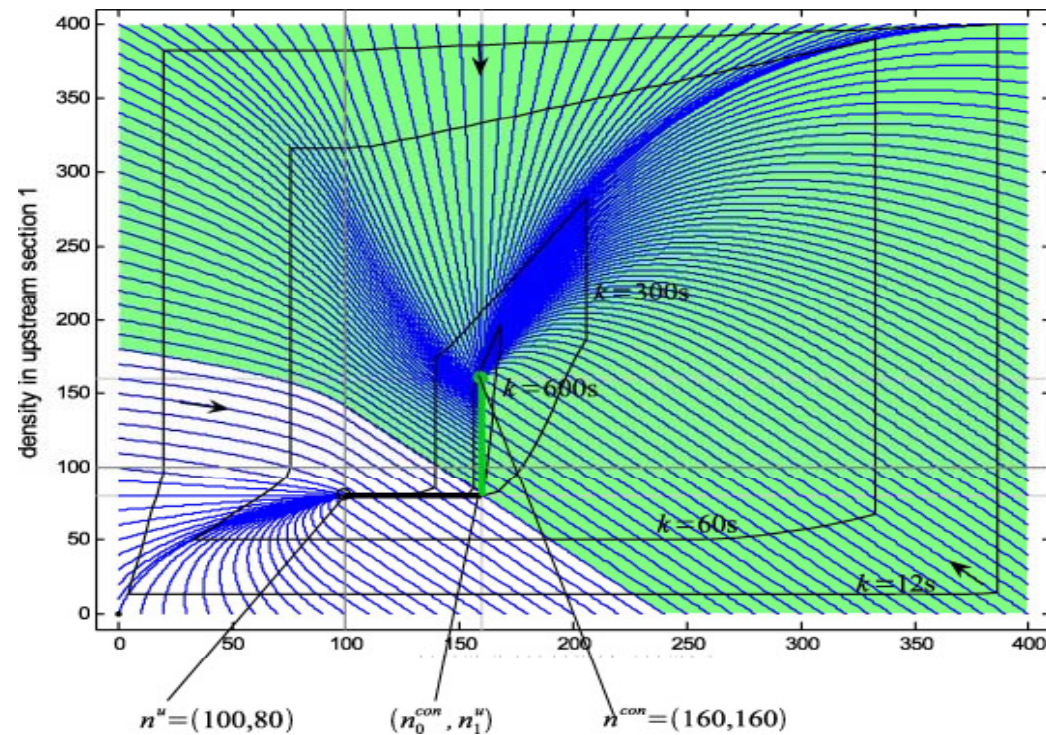


TRÀNSIT

Mecànica de fluids: **R.I.P.**



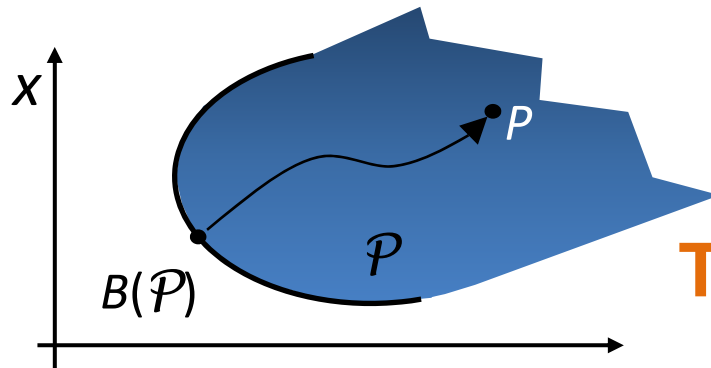
Models de transmissió de cel·les: CTM



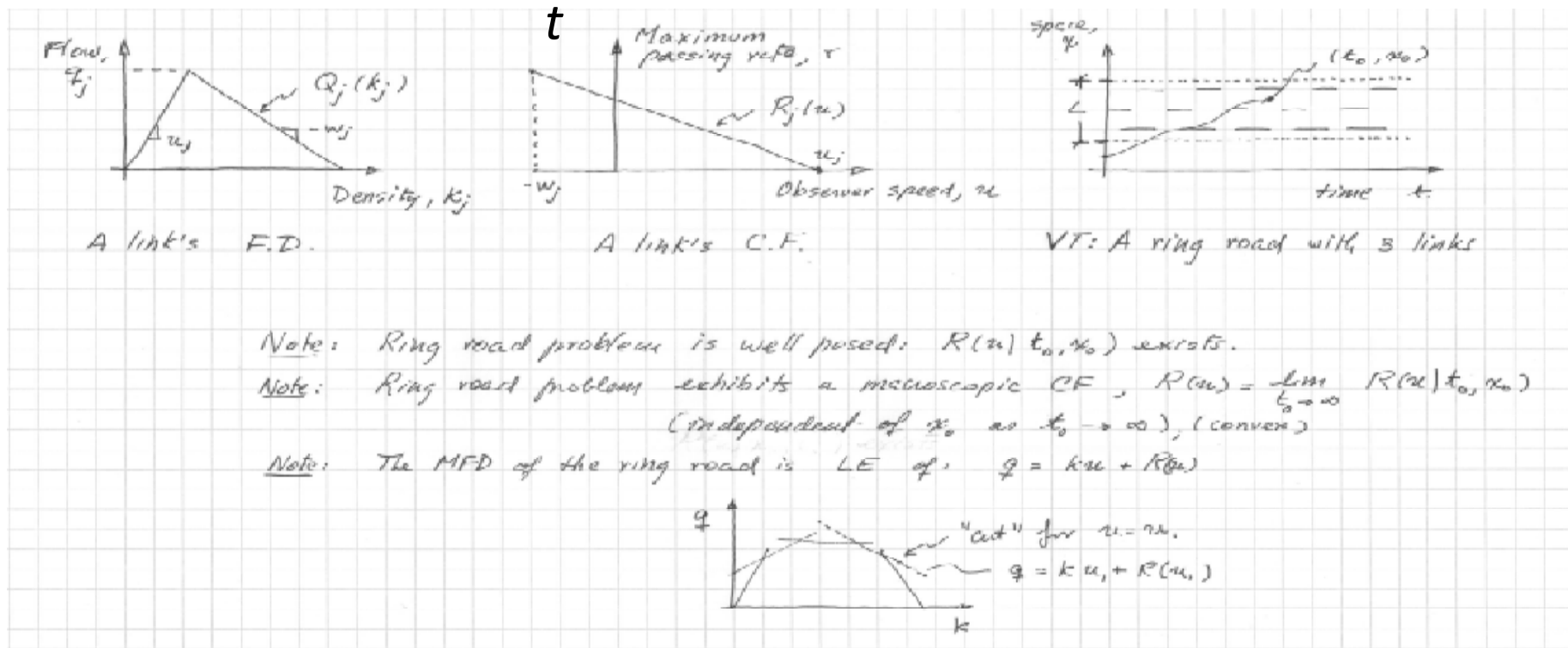
Coils d'ampolla mòbils



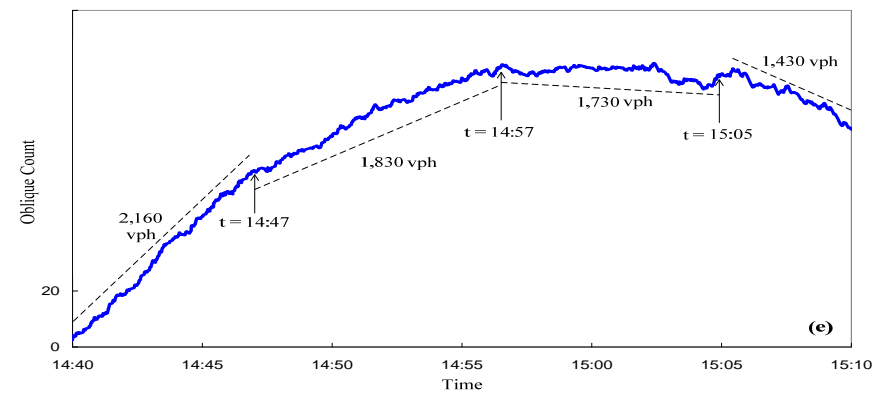
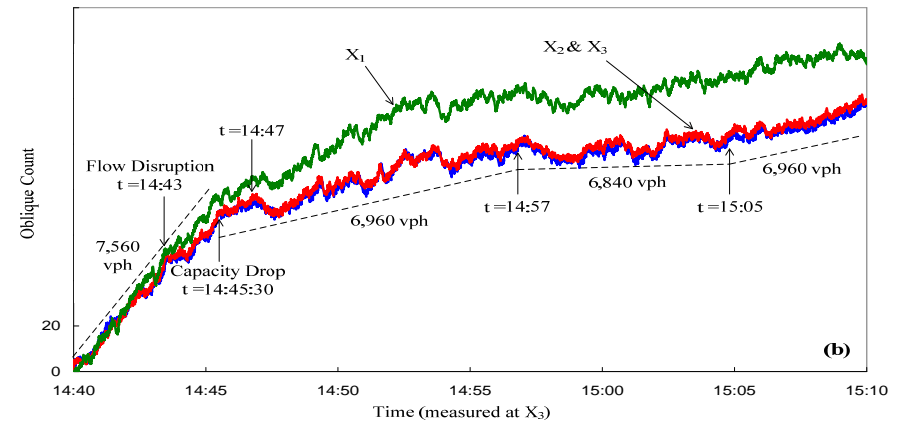
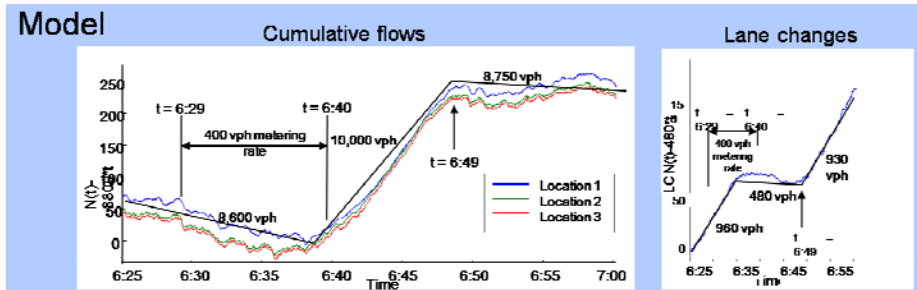
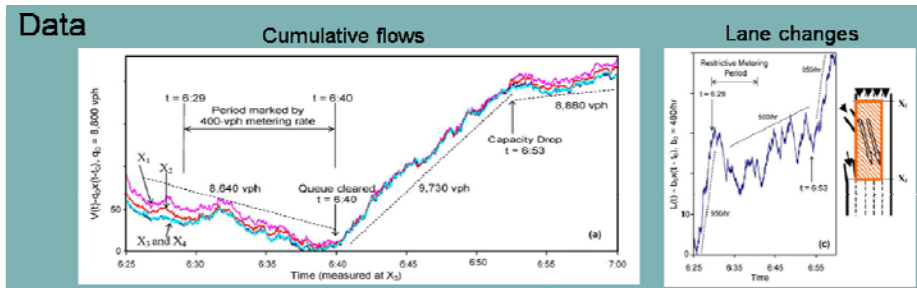
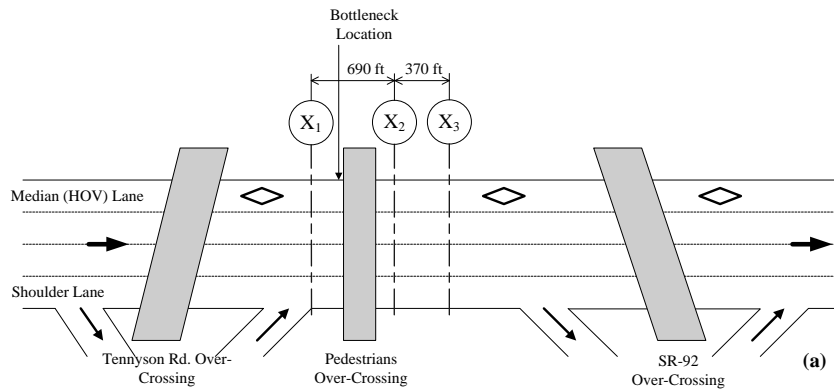
TRÀNSIT



Teoria variacional del trànsit (VT)

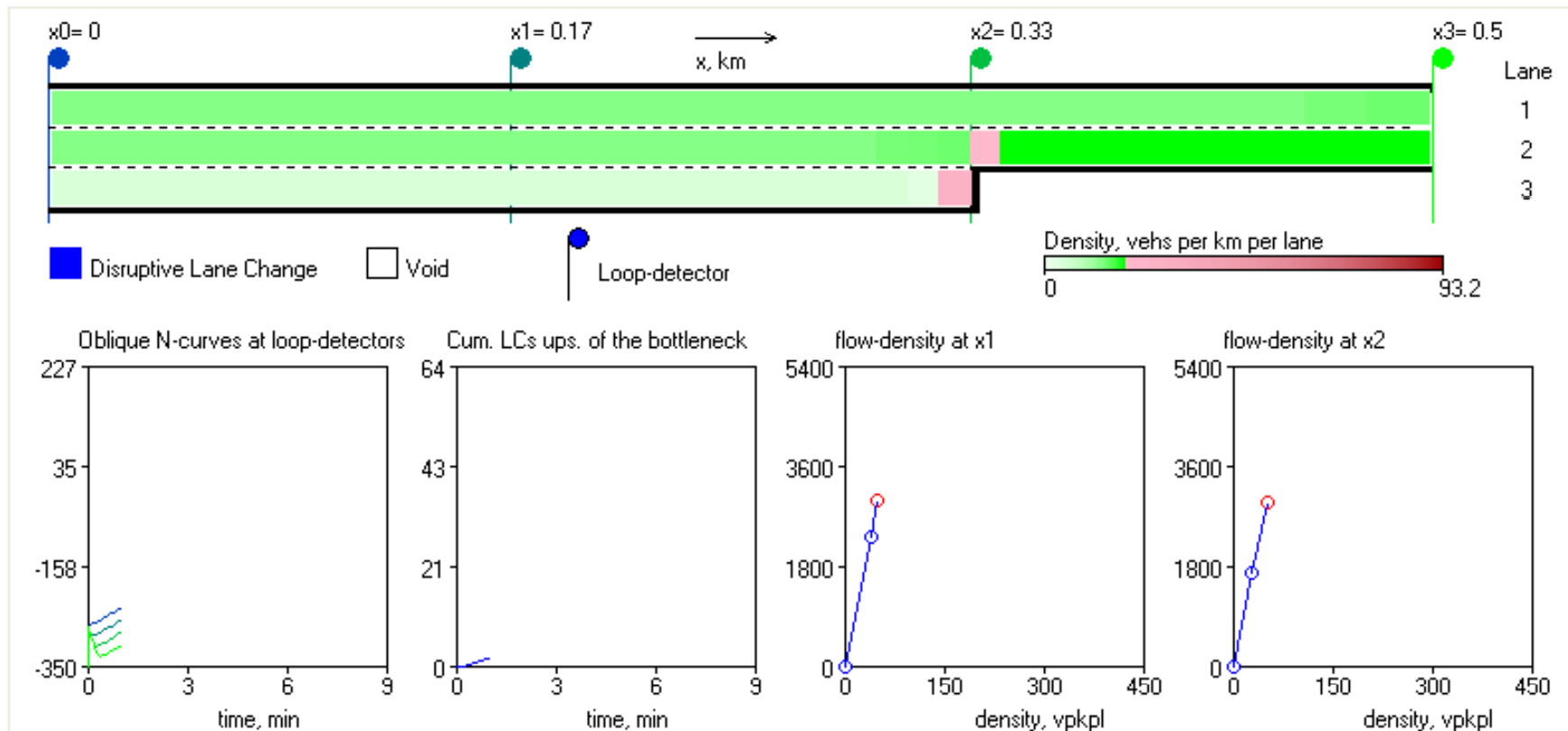


TRÀNSIT



TRÀNSIT

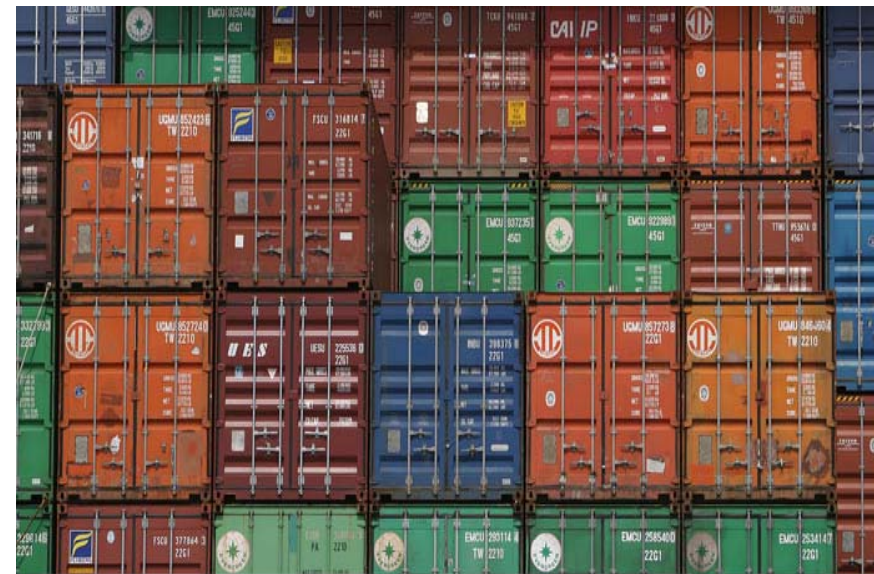
Coll d'ampolla format per una reducció de # de carrils



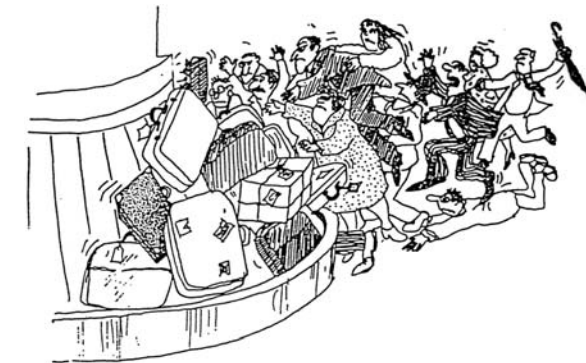
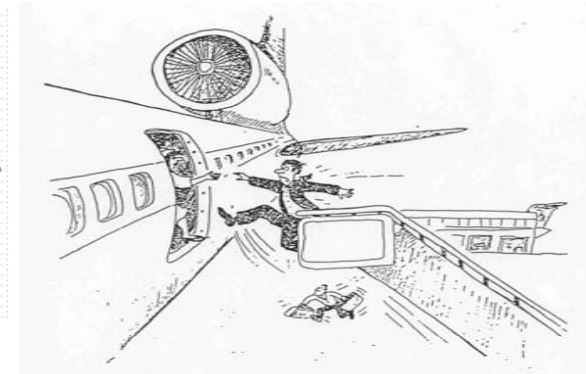
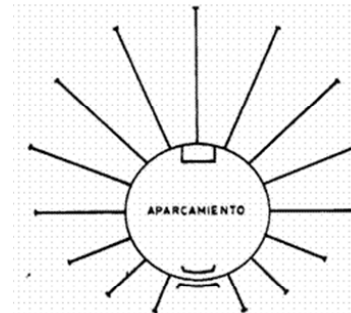
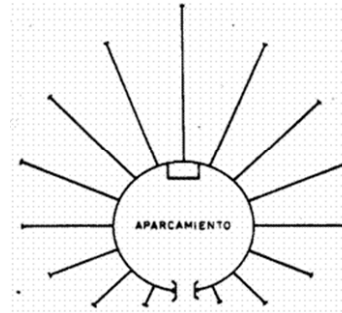
FFCC

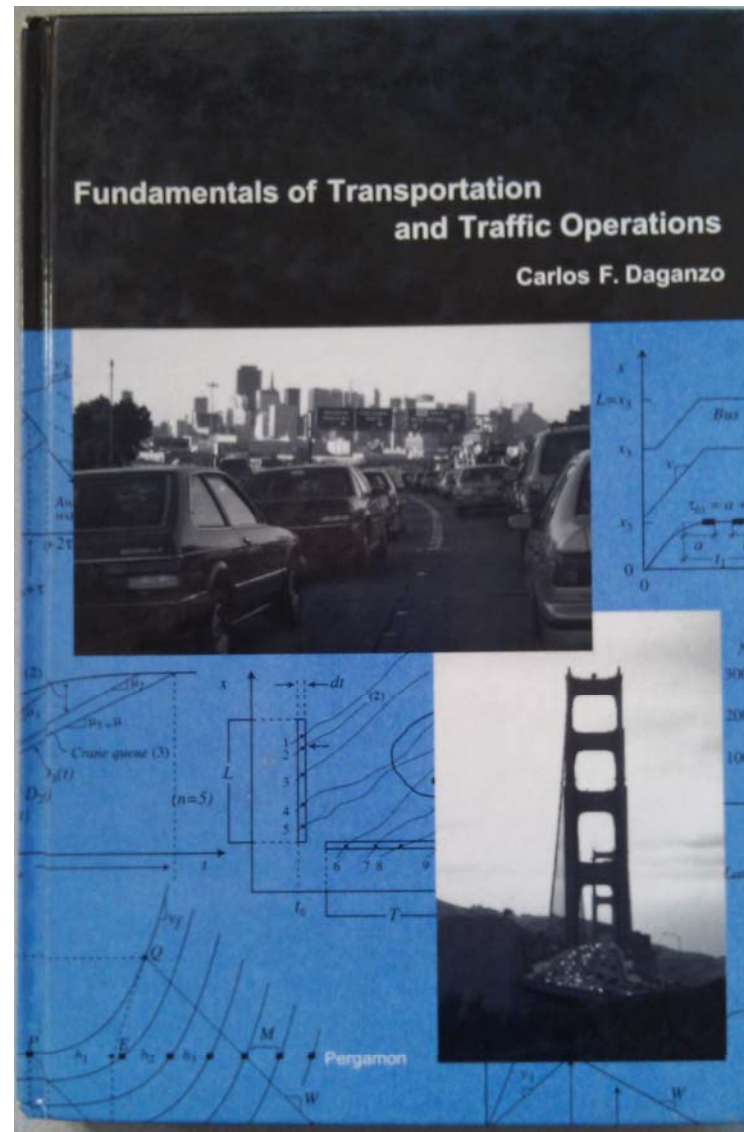


PORTS

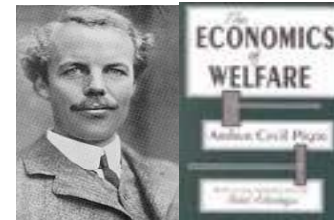


AEROPORTS

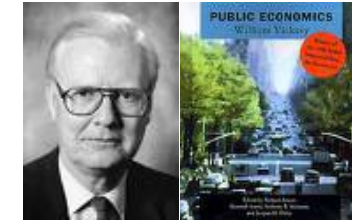




TARIFACIÓ



Arthur Pigou



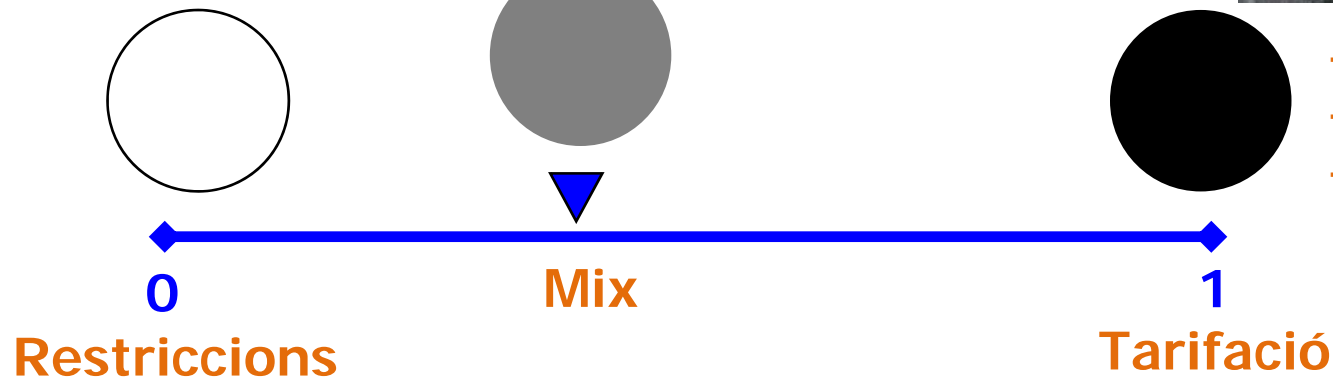
William Vickrey



A Pareto optimum congestion reduction scheme (1995)

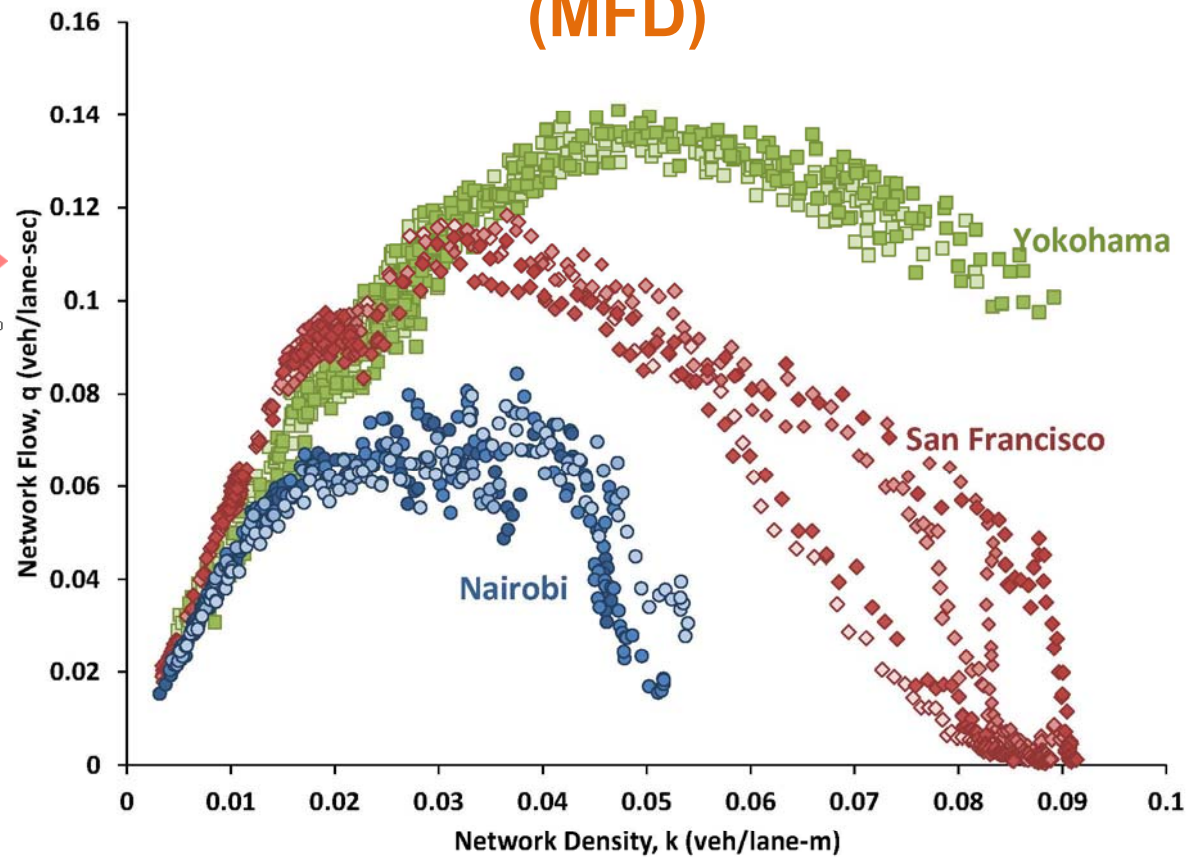
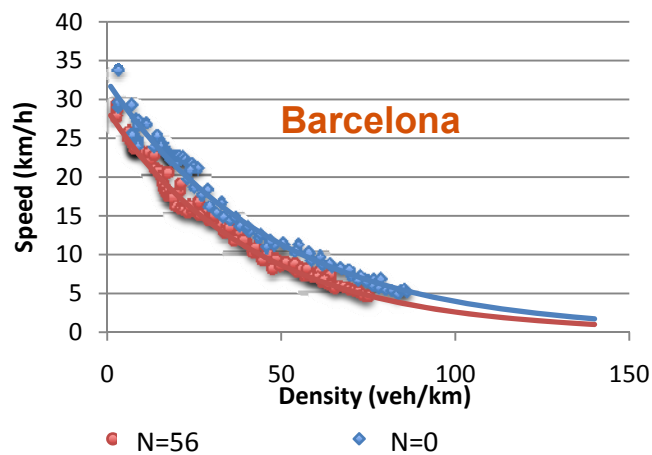
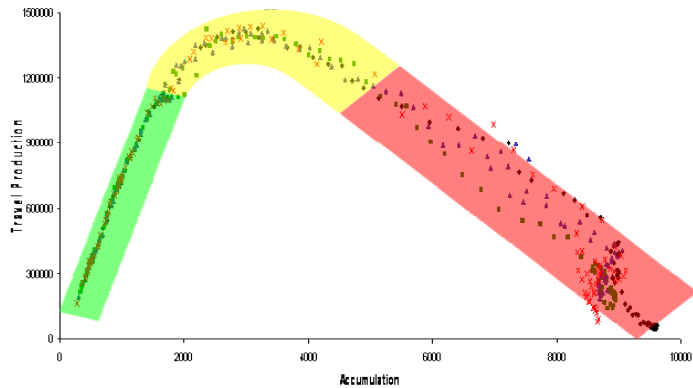


- Londres (2003)
- Estocolm (2007)
- Milà (2008)



MOBILITAT URBANA

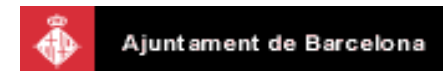
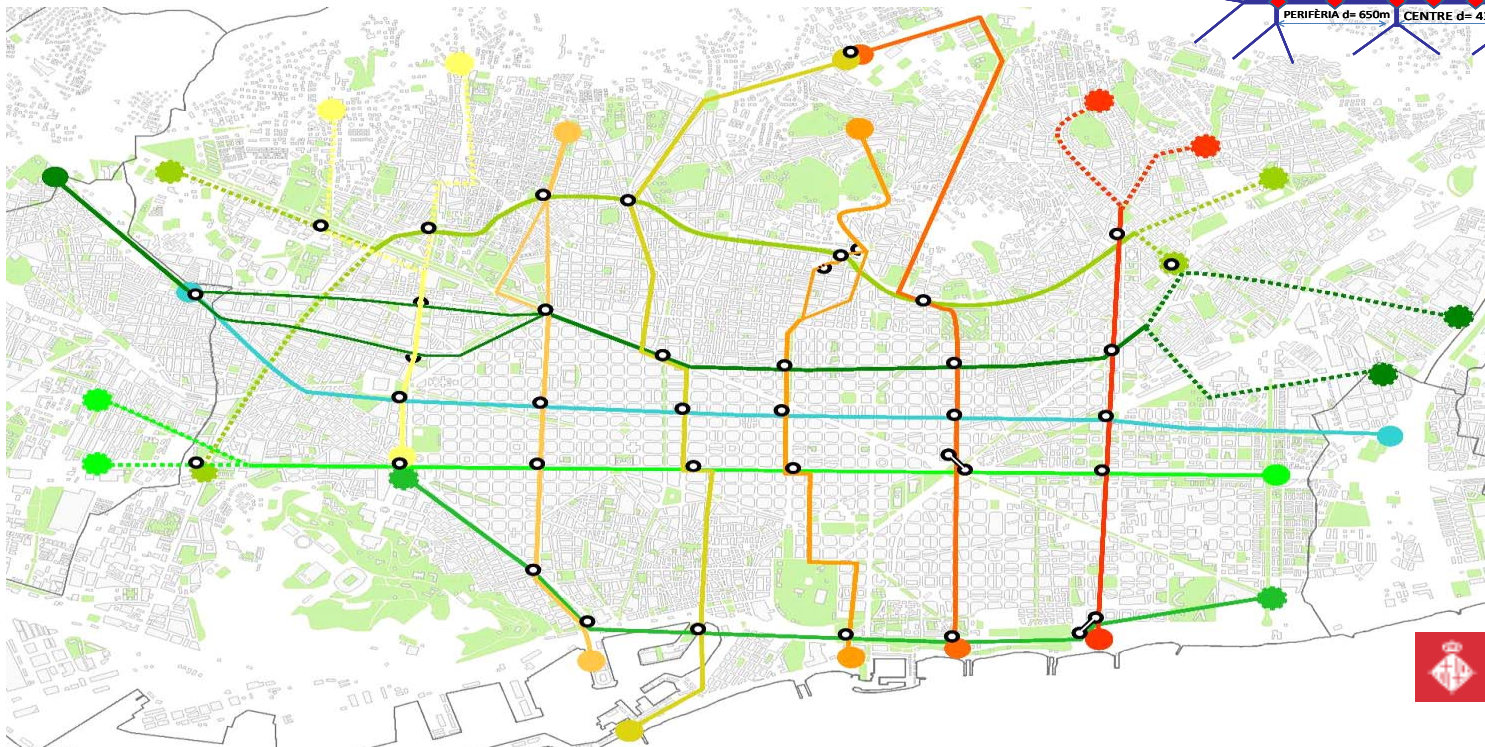
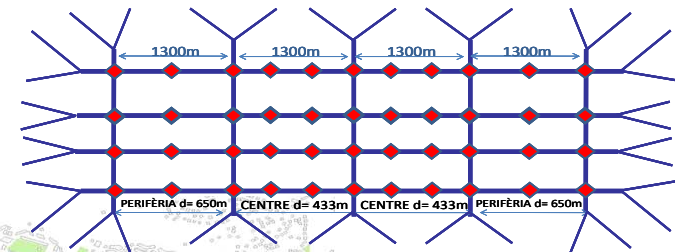
Diagrama fonamental macroscòpic del trànsit en ciutats (MFD)



MOBILITAT URBANA

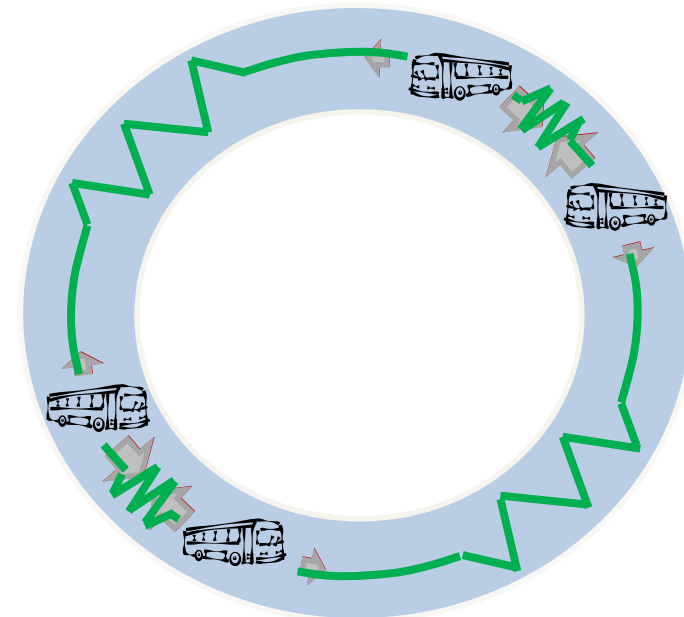
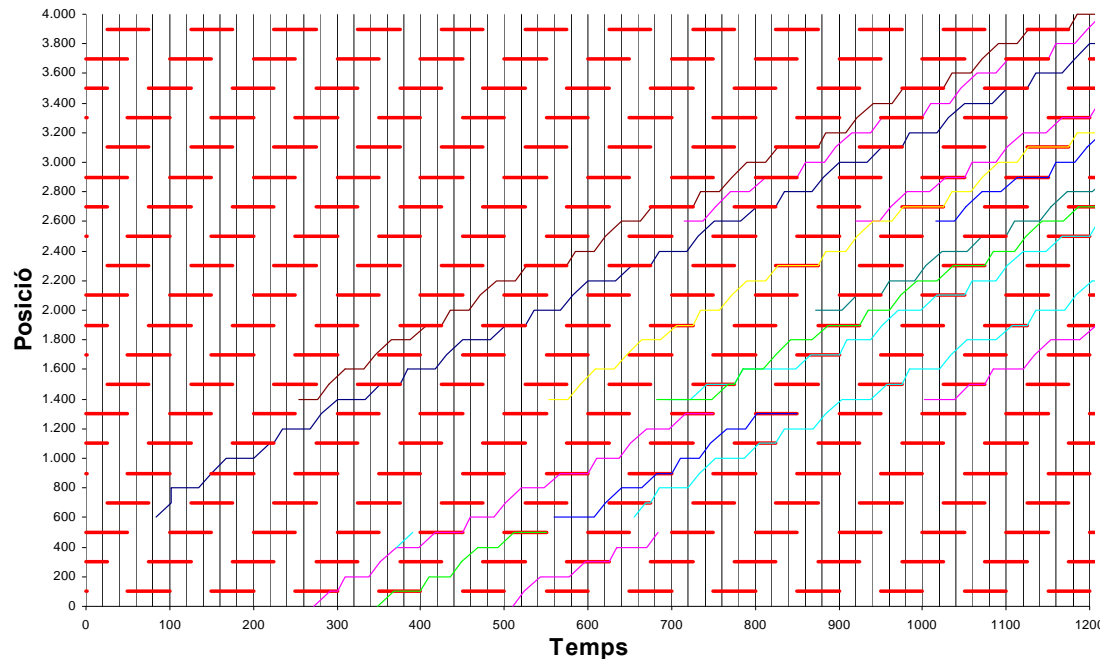
Disseny de xarxes d'autobusos eficients

Min cost social =
usuaris + operador + externalitats



MOBILITAT URBANA

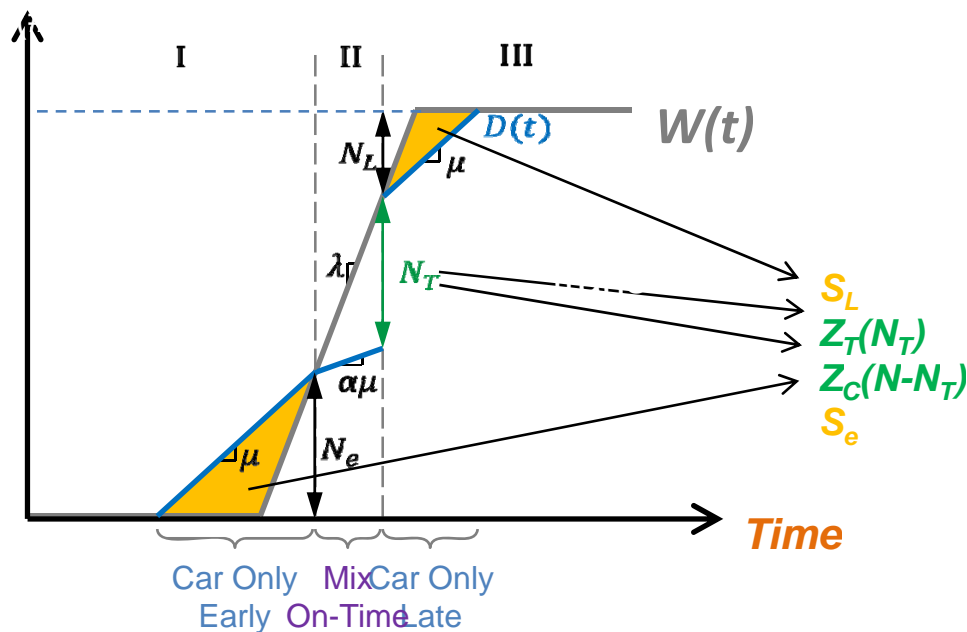
BLIP: Bus lane with intermittent priority



MOBILITAT DE LES SMART CITIES



Cum. Trips







Bluegrass music (hillbilly)

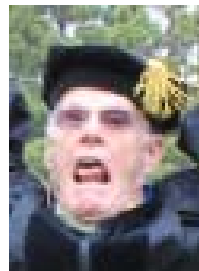




Valery

Carlos F. Daganzo, doctor *honoris causa*

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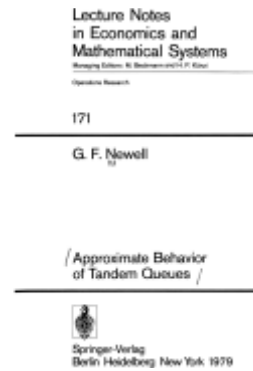
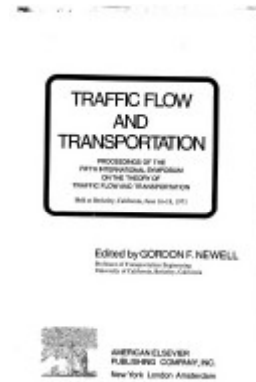
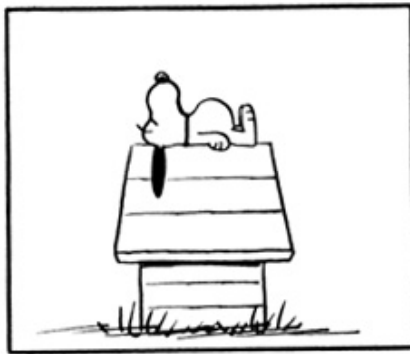
**Berkeley
University
Logistics
Laboratory:
Shipping
Handling
Inventory and
Transportation**



1988

2011





Gordon F. Newell

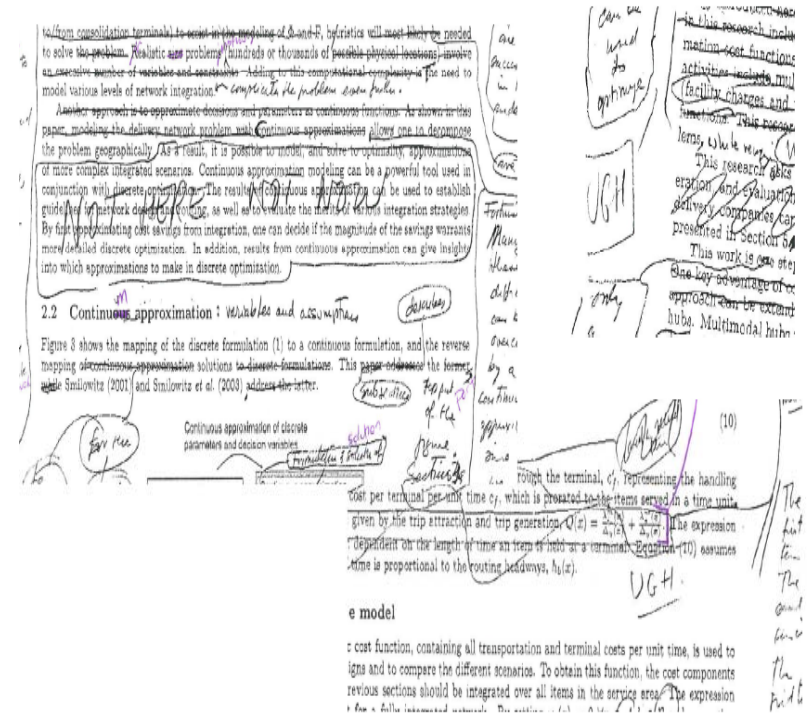


Carlos F. Daganzo, doctor *honoris causa*

Barcelona, 28 de març de 2012



Graduate Student Faculty Mentor Award, 2008



Carlos Daganzo (left)

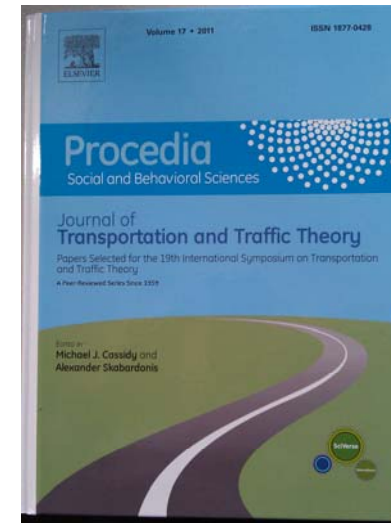
“work hard, be smart”

“this is trivial”

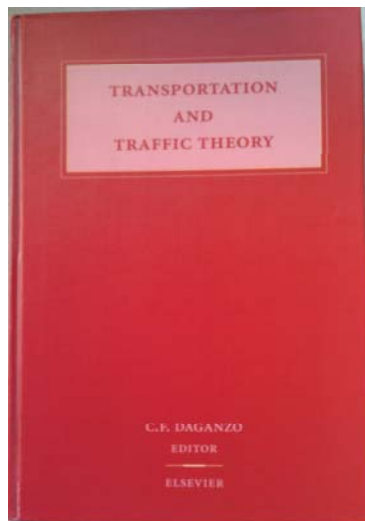
FMA winner Carlos Daganzo (left) told one of his students “the secret of becoming very well known and successful: work extremely hard all the time and use the maximum of your intelligence at the same time, all the time, when you are working, eating, walking, and so on. Anyone who does that will be very successful.” The student nominated him anyway.



40 tesis doctorals



ISTTT
2011



ISTTT
1993



Carlos F. Daganzo, doctor *honoris causa*

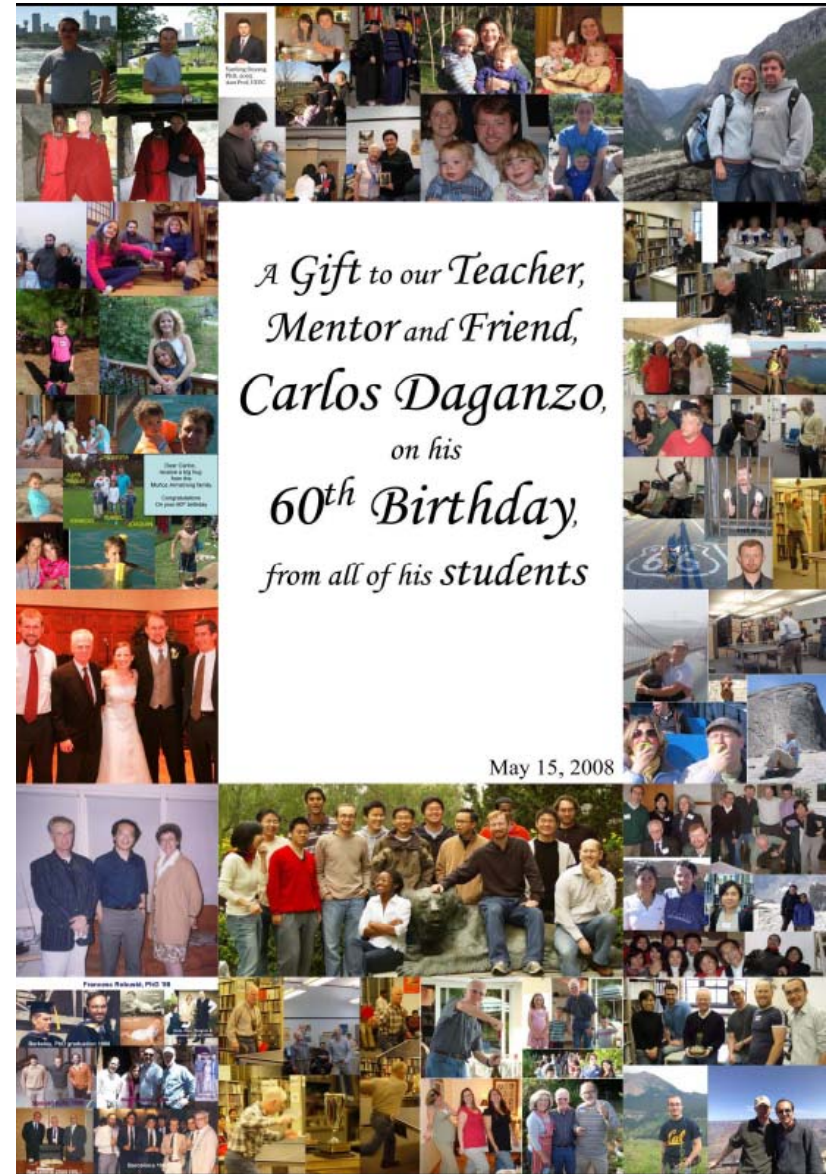
Barcelona, 28 de març de 2012



ISTTT 2011, Berkeley



↑
**THE MAN
 THE MYTH
 THE LEGEND**
 ↓

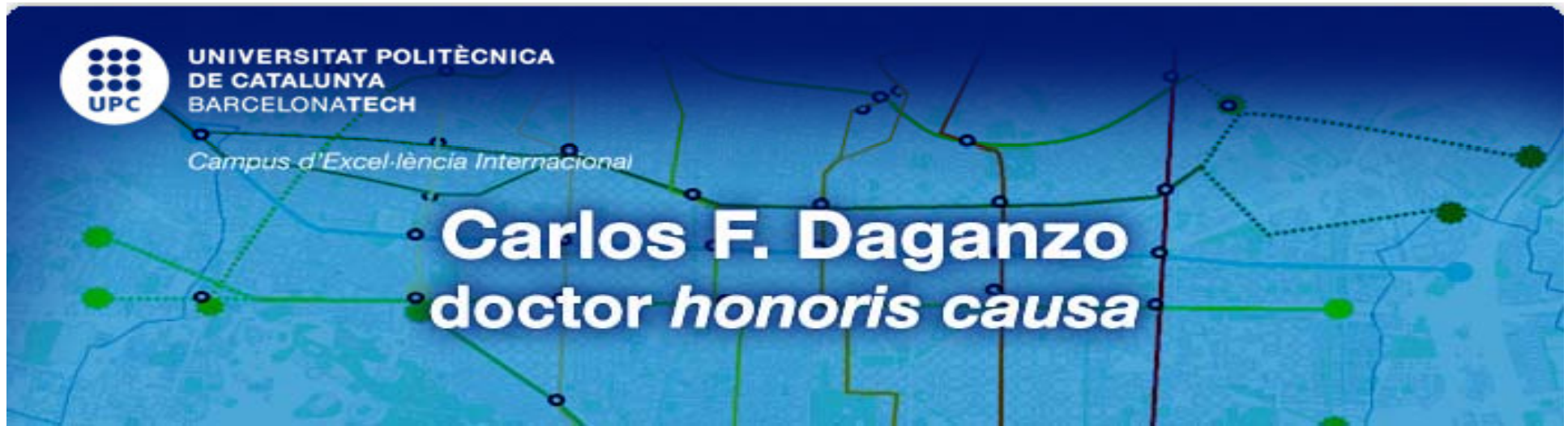


*A Gift to our Teacher,
 Mentor and Friend,
 Carlos Daganzo,
 on his
 60th Birthday,
 from all of his students*

May 15, 2008

Carlos F. Daganzo, doctor *honoris causa*

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