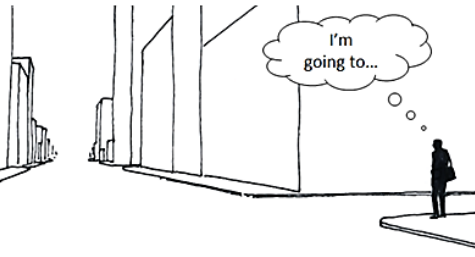




ITRL – INTEGRATED TRANSPORT RESEARCH LAB



LABATON WORKSHOP

WHAT IS

A CAR
A TRUCK
A BUS
IN 2025?

WHY

THE AUTOMOTIVE INDUSTRY IS ENTERING A SHARP BEND.

FROM FOSSIL TO ELECTRIC.
FROM DRIVER TO AUTONOMOUS.
FROM MECHANICAL TO BY-WIRE OR LESS.
FROM HEAVY TO LIGHT WEIGHT.
FROM TRADITIONAL TO NEW PLAYERS.
FROM HIGH VOLUME TO 3D PRINT.
FROM SELLING TO PROVIDING A SERVICE.
FROM MOSTLY PARKED TO MOSTLY ROLLING.
FROM RANDOM TO BIG DATA.

STILL, MAN AND STREETS WILL STAY MUCH THE SAME AND VEHICLES WILL BE NEEDED TO GO.

HOW

DISCUSSING
BUILDING MOCK-UPS
EXPERIMENTING
EXCHANGING IDEAS
LEARNING.

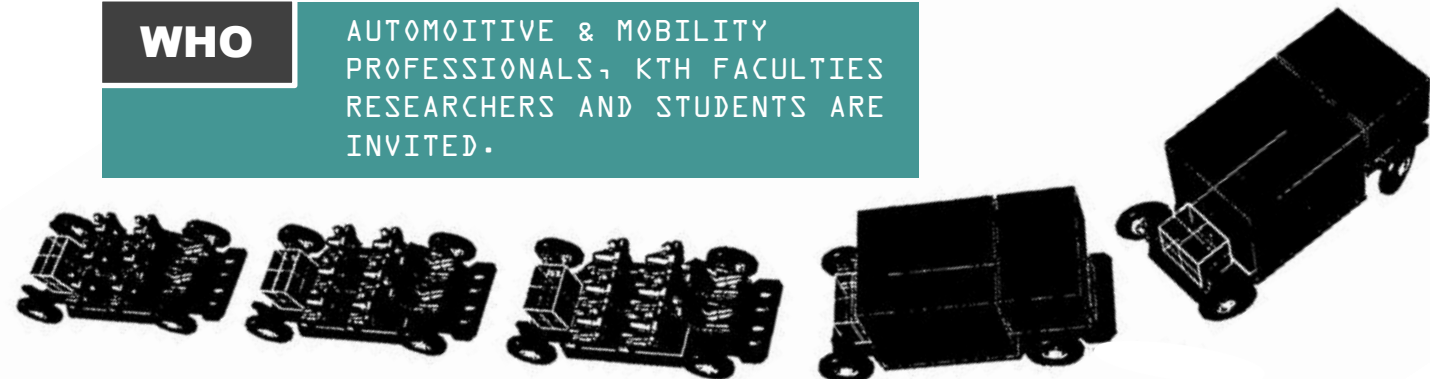
A WEEK OF HOLISTIC
CONCEPT THINKING AND
ENGINEERING.

APPLY FOR JOINING
ONE AM OR PM OR ALL
4 DAYS.

evalill@kth.se

WHO

AUTOMOTIVE & MOBILITY
PROFESSIONALS, KTH FACULTIES
RESEARCHERS AND STUDENTS ARE
INVITED.



WHEN

APRIL 27-30 2015

WHERE

AT ITRL. [MORE >](#)



ITRL – INTEGRATED TRANSPORT RESEARCH LAB

KTH ROYAL INSTITUTE OF TECHNOLOGY



LABATON WORKSHOP AT ITRL

WHAT IS

A BUS
A TRUCK
A CAR IN 2025?

KTH – ITRL

Brinellvägen 83, 100 44 Stockholm

Day 1 April 27

09.00 introduction to the LABATON.

10.30 Discussion: Infrastructure in 2025; Streets/roads, energy and data.

13.30 Discussion: Man's mobility and goods in 2025

16.30 Optional discussion.

Day 2

09.00 Vehicle architecture: Creating concepts from scratch. Solutions for seating, ingress/egress, loading.

Parallel discussions: What will attract users?



13.30 Vehicle architecture: Building base dimensions, function placement, package variants.

Parallel discussions: A bus, a truck, a car – should they be more alike or not?

16.30 Optional continued building and discussion

Day 3

09.00 Vehicle concept interior: User needs, design. Panels, volumes.

Interior climate solutions. Parallel discussion: Steering wheel or what? Interior safety in AV's? Screens vs windows?

13.30 Vehicle concept interior/exterior: Structure BIW architecture and material, exterior panels.

Parallel discussion: Life cycle, economics for vehicles in constant use.

16.30 – evening. Mockup building, preparing documentation and presentation.

Day 4.

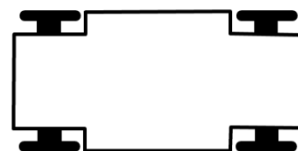
09.00 Show! Ideation outcome and full-size 1:1 mockups.

12.30 End.

A thinking and working LABATON

The future automotive industry heads for many challenges: Electric and autonomous drive-by-wire, longer mileage per vehicle, less of selling vehicle hardware and more of providing a service, light weight composites, low volume production or 3D-print, seamless relationship with infrastructures and urban Big Data.

The LABATON workshop will investigate vehicle concepts on a 10 year horizon based on two preconditions: 1) the KTH Research Concept Vehicle (RCV) <https://www.youtube.com/watch?v=a-hvCL1y7ME> with the electric drive Autonomous Corner Module (ACM) platform principles. 2) The &Car free platform initiative for future cars, people mobility and goods delivery.



Concept thinking and engineering in the early stages is the workshop focus. Simple full scale 1:1 mockups will be built. The physical trial-and-error work and equally important discussions between the different participating disciplines aim at finding approximate holistic answers to what these new vehicle are. Idea boards will be created through discussions. Function, volumes and positions of vehicle systems will be fabricated with simple materials like plastic foam, wire rods, tape, etc.

Framework for applicants:

Choose preferred am/pm or all 4 days. Send mail with your title/experience or academic program. Professionals are encouraged to do a short presentation of the latest findings in their fields. All participants are expected to engage in joint discussing, building, CAD-building, etc. ITRL provides materials and tools as well as project hosting/leadership during the week. Bring your best creativity. Dress wisely for crafting in workshop. Fika will be available daytime. Lunches at participants expense. For those working late take-home-to-workshop dinner is free.

This first LABATON is free of charge. The project result will be open to the public and published in KTH documents and media and as a time lap film. Participants need to grant permission for appearing in photos.

Number of participants is limited.

Applications welcome before March 27, 2015.

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Questions: Per Gyllenspetz Phone +46 702-192799

