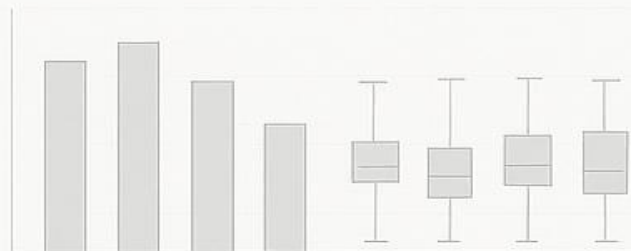


Time (s)

# ADVANCED RACECAR DATA ANALYSIS SEMINAR

28-30 JANUARY 2026  
LUXEMBOURG



Lap	Time	Sector1	Sector2
1	1.54.71	1.35	1.25
2	1.54.77	1.46	1.30
3	1.54.71	1.48	1.25
4	1.54.14	1.50	1.80
5	1.54.31	1.70	1.70





# INTRODUCTION

In the world of motorsports, milliseconds can be the difference between victory and defeat. To stay ahead of the curve, racing teams and engineers rely on a wealth of data collected from the most advanced sensors and technology embedded in modern race cars. This course is designed to empower you with the knowledge and expertise required to optimize, interpret and analyse this data for ultimate performance.

The seminar is developed for professionals in the motorsport industry and is the ideal follow-up for the 'Race Car Performance Engineering' and 'Race Car Data Acquisition & Analysis' seminars.

Over the period of 3 days the participants will explore data-driven techniques to unlock performance from car, driver and tires. These techniques and insights are not just valuable but immediately applicable to any type of race car and across diverse championships.

JORGE SEGERS





# COURSE OUTLINE



## DAY 1

- **Course introduction**
- **Introduction to metrics-based data analysis**
  - Creating KPIs
  - Special math channels for KPI creation
  - Putting together a KPI database
- **Working with Spotfire**
  - Software introduction
  - Importing data into Spotfire
  - The data canvas
  - Data visualization in Spotfire
  - Creating templates
  - Trendlines
  - Filtering
  - Creating calculated channels
- **Case studies**
  - F1 porpoising analysis
  - Importing data from any data acquisition system in Spotfire
  - Analyzing timing data with Spotfire





# COURSE OUTLINE

## DAY 2

- **Vehicle vitals: tracking and ensuring reliability**
- **The main car performance metrics**
- **Grip and balance**
  - Calculating grip factors
  - Calculating car balance
  - Calculating stability
- **Track characterization metrics**
- **Driver performance metrics**
  - Acceleration
  - Braking
  - Cornering
- **The driving line**
  - Corner radius
  - Advanced driving line metrics
  - What is the correct driving line?
- **Braking performance**
  - Brake energy and power
  - Brake cooling / temperature management





# COURSE OUTLINE

## DAY 3

- **Aerodynamics**
  - Working with pitot data
  - Downforce, drag and aerobalance
  - Setup exploration on an LMP3 car
- **Tires**
  - Tire pressure measurement
  - Tire temperature measurement
  - Tire operating windows
  - Calculating tire energies
- **The differential**
  - Limited slip differentials
  - Preload, ramp angles and friction faces effects
- **Suspension geometry**
  - Introduction to Race.Software
  - Roll centers
  - Suspension 'antis'
  - Bumpsteer
  - Case study LMP3 front suspension kinematics





# USED SOFTWARE PACKAGES



**Spotfire Analyst** is a powerful data visualization and business intelligence software platform designed for data analysis, exploration, and reporting. It allows users to connect to various data sources, including databases, spreadsheets, and cloud services, and then create interactive and dynamic visualizations, dashboards, and reports.



**MoTeC i2 Pro** is designed to analyse data collected from various sensors and data acquisition systems installed in race cars. It helps users understand the performance and behaviour of the vehicle on the track. The software provides tools for creating custom graphs, charts, and visualizations to display vehicle data such as engine parameters, suspension settings, and telemetry data.



**RACE** (Rapid Axle Concept Evolution) is an end-to-end MBS (multibody simulation) / MBD (multibody dynamics) software package for the development of suspension systems. It combines model build, model parameterization, post-process, data storage, and report generation into a single platform. It is cloud-based, requires no software installation and can be run from a web browser on any computer, phone or tablet.





# REGISTER NOW!

## Upcoming seminar:

### **GRIDX**

4-6 Rue des Trois Cantons  
L-3980 Wickrange  
Luxembourg

**28 – 30 January 2026**

Registration fee: € 1050,-

Students and FSAE members: € 850,-

*Prices are excluding VAT*

### **The seminar fee includes:**

- Lunch, drinks and refreshments during the 3 seminar days
- Seminar presentation in digital format
- 14-day trial licence of Race.Software suspension kinematics simulation software
- 30-day trial licence of Spotfire Analytics
- Certificate of course completion

GRIDX is located 20 minutes from LUX international airport.



<https://gridx.lu/en>



GRIDX

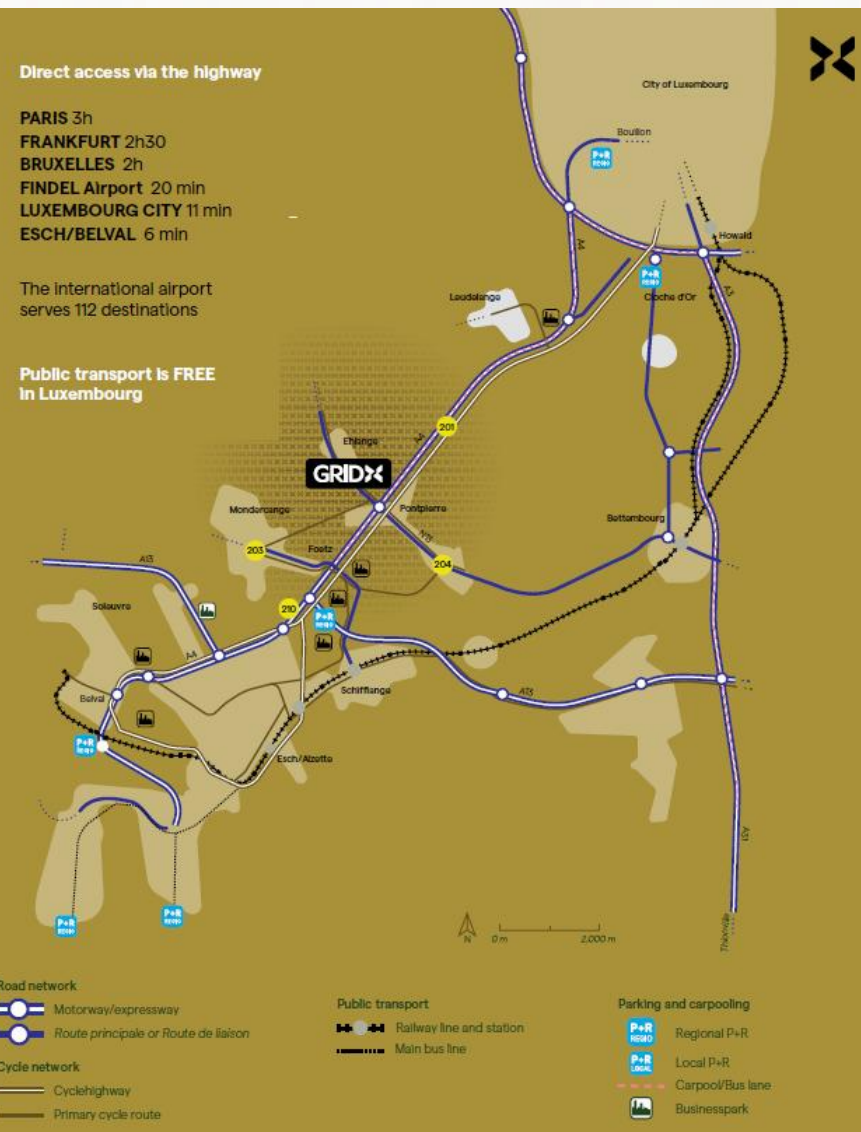
# GRIDX

Direct access via the highway

PARIS 3h  
FRANKFURT 2h30  
BRUXELLES 2h  
FINDEL Airport 20 min  
LUXEMBOURG CITY 11 min  
ESCH/BELVAL 6 min

The international airport  
serves 112 destinations

Public transport is FREE  
in Luxembourg





# REGISTER NOW!

## **Register by e-mail:**

Download the registration form on **www.js-engineering.be** and mail to **jorge.segers@js-engineering.be**. We will send you our bank details.

The seminar is strictly limited to maximum 30 persons and a first come first served policy is applied. The order of registrations is determined by the date that the full payment for the seminar registration is received.

Pre-payment is required to confirm the attendee's registration. Registrations without payment received will not be confirmed until after payment is received.

## **Seminar cancellation policy**

We know things come up from time to time and there could be a possibility that you have to cancel. We also know and appreciate your understanding about operation and overhead costs involved when planning seminars; therefore, cancellations will be handled in the following manner:

All cancellations and changes must be presented to us in writing.

If you cancel more than 10 days prior to the seminar starting date, we will issue a refund minus a €200.00 administration fee.

If you cancel less than 10 days prior to the seminar starting date, no refund will be issued. In this case it is possible to reschedule to a future seminar subject to a €200.00 administration fee.

There will be no refunds or rescheduling for no-shows.

JS Engineering BV reserves the right to cancel or reschedule seminars in case of insufficient attendance, provided that advanced notice is provided to registered attendees. In the event of cancellation or rescheduling, the limit of liability on JS Engineering BV will be the original seminar fee. JS Engineering BV accepts no responsibility or liability for any other costs or fees incurred by attendees including, but not limited to, expenses associated with pre-booked travel arrangements.

For more information contact us at **jorge.segers@js-engineering.be**





# ACCOMMODATION



## NOTO Hotel

4-6 Route des Trois Cantons

3980 Wickrange

Luxembourg

+35 20 10 20 50

[notohotel.com/en](https://notohotel.com/en)



For accommodation during the seminar days, we recommend NOTO Hotel, which is located within GRIDX.

A special room rate for seminar attendees applies:

- Standard room, single occupancy
- Breakfast included
- € 125.00,- per night (including VAT)
- Subject to availability

You can book a room by contacting [reservations@notohotel.com](mailto:reservations@notohotel.com) directly, mentioning your participation in the JS Engineering BV seminar.