

The Science of Driving

Topics

Overview

Driving as problem solving, situation analysis, information processing & decisions

Physiology

Body chemistry, drugs, heart rate, reaction times, physical training, the red mist

Vision

E Point, using your eyes, road analysis, eye motion: peripheral, rear, range & focus.

CRESTS

Situation analysis, driving decisions

Tires

Tire behavior, performance & limits

Chassis

Chassis component function & tuning

Dynamics

Vehicle dynamic behavior

Track analysis

Track analysis from maps & data collection

Race tactics

Starting, passing, crash avoidance, risks

Data Analysis

Understanding and analyzing data collection

Brakes

Optimized braking, dynamic bias, braking turn-ins

G forces

Lateral Gs, vector G sums, steer angle, slip angle, throttle steer, brake steer.