



Wrocław
University
of Science
and Technology

Identyfikacja kinematyki koła jezdnego we współczesnych i przyszłych układach zawieszzeń pojazdów samochodowych

Identification of road wheel kinematics in present and future automotive vehicle suspension systems

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Main suspension development directions :

- complex suspension management systems,
- real-time change of kinematics,
- adaptive to active suspension transformation,
- electric energy recovery system,
- AI based design tools.

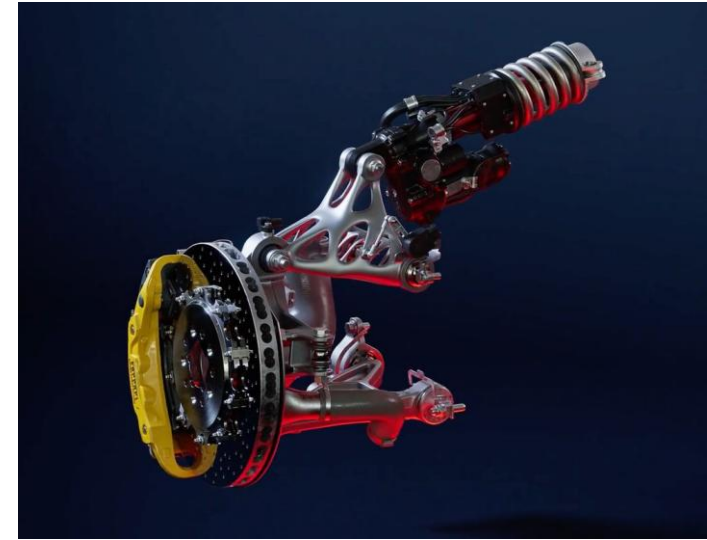


Figure 1: The Ferrari F80 rear suspension with Multimatic True Active Spool Valve damper

Source: Motor1.com

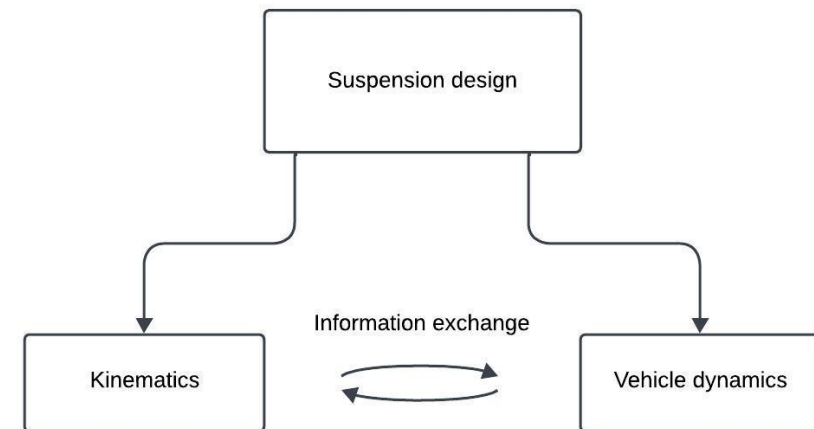


Figure 2: Schematic suspension design process

Identification of road wheel kinematics in suspension system

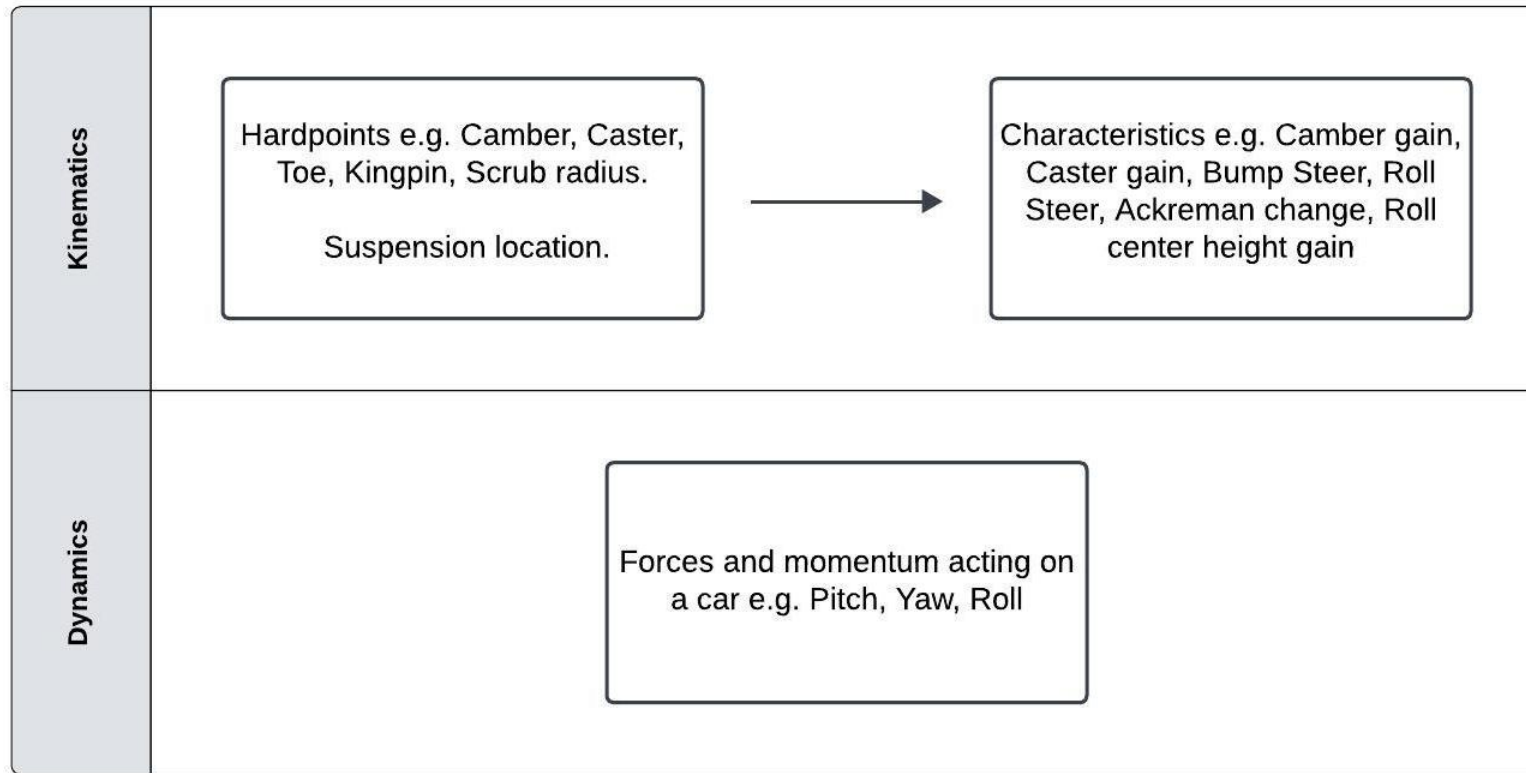


Figure 3: Kinematics and dynamics identification

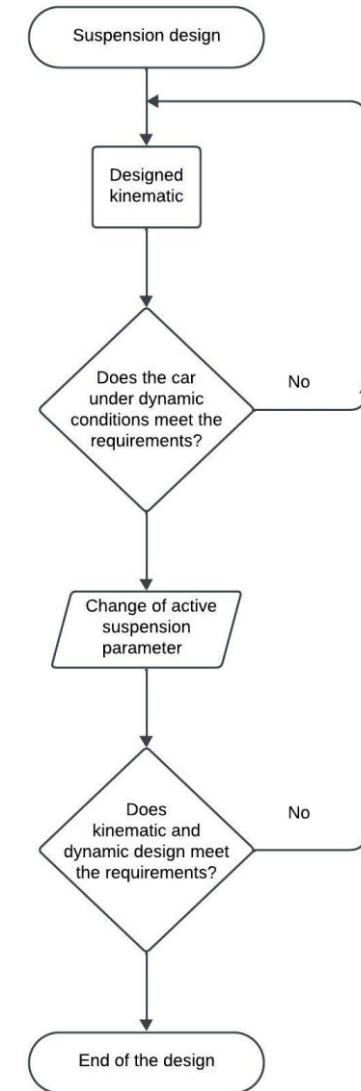


Figure 4: Block diagram proposal