

# ***B7: Shock Absorber Tuning***

***(Analysis and alignment of vehicle dynamics with shock absorber performance)***

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## ***Background***

- In this project the optimization of the dampers will be aligned to the vehicle dynamics of the SAE car.
- This involves characterizing the vehicle dynamics. This is the roll bar stiffness, front/rear wheel frequencies, spring stiffness, and the damped, un-damped masses of the car.

## ***Proposed Work***

- Calculation of theoretical characteristics of the damping system.
- Physical analysis of suspension and tuning to specifications on a shock dynamometer.
- Optimization of the performance of the SAE car vehicle dynamics
- Participation in the collegiate competition this June.



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