

↳ Whenever there is a ~~use~~ load transfer the grip level reduces.

↳ Making the inputs (turning, acceleration, ~~braking~~ braking) smooth than sharp transfers less weight maintaining high grip levels all the time.

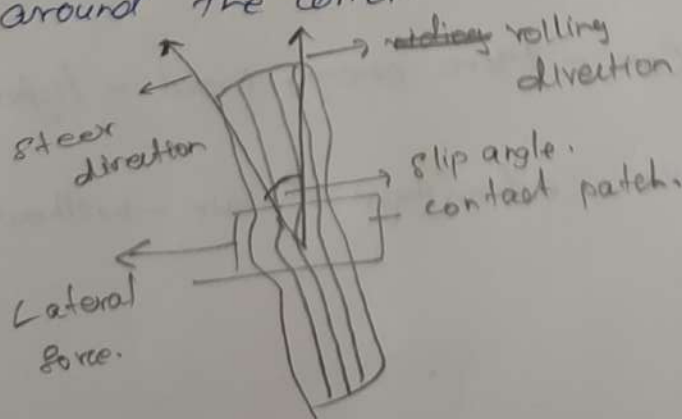
→ Tyre Slip Angle.

↳ Contact patch: Tyre material part and road briefly stick together creating grip.

↳ Slip happens around corner when the tyre moving straight turns with the steer.

When this happens during run, the next piece of contact patch comes down slightly offset from the ~~current~~ current

~~This~~ This creates the lateral force that pulls the car around the corner.



↳ During the steering the angle of direction the tyre was rolling in is changed with the steer to a new angle - this difference is "Slip Angle".

↳ When driving straight and turn the lateral force created is called "Cornering force".

More cornering force - Faster turn. - Less slow down.

↳ More slip angle - more cornering force, however this stays limited till the friction brakes and loose grip. This happens during fast cornerings.

↳ Cornering for slip angle increases with vertical / downward load.

↳ Increasing vertical load comes down to 2 versions.

1. Heavy Race Car
2. Better Aerodynamics.

Heavy Race Car - More energy input - light cars - quick.

Aerodynamics - advantage of air - without added weight.