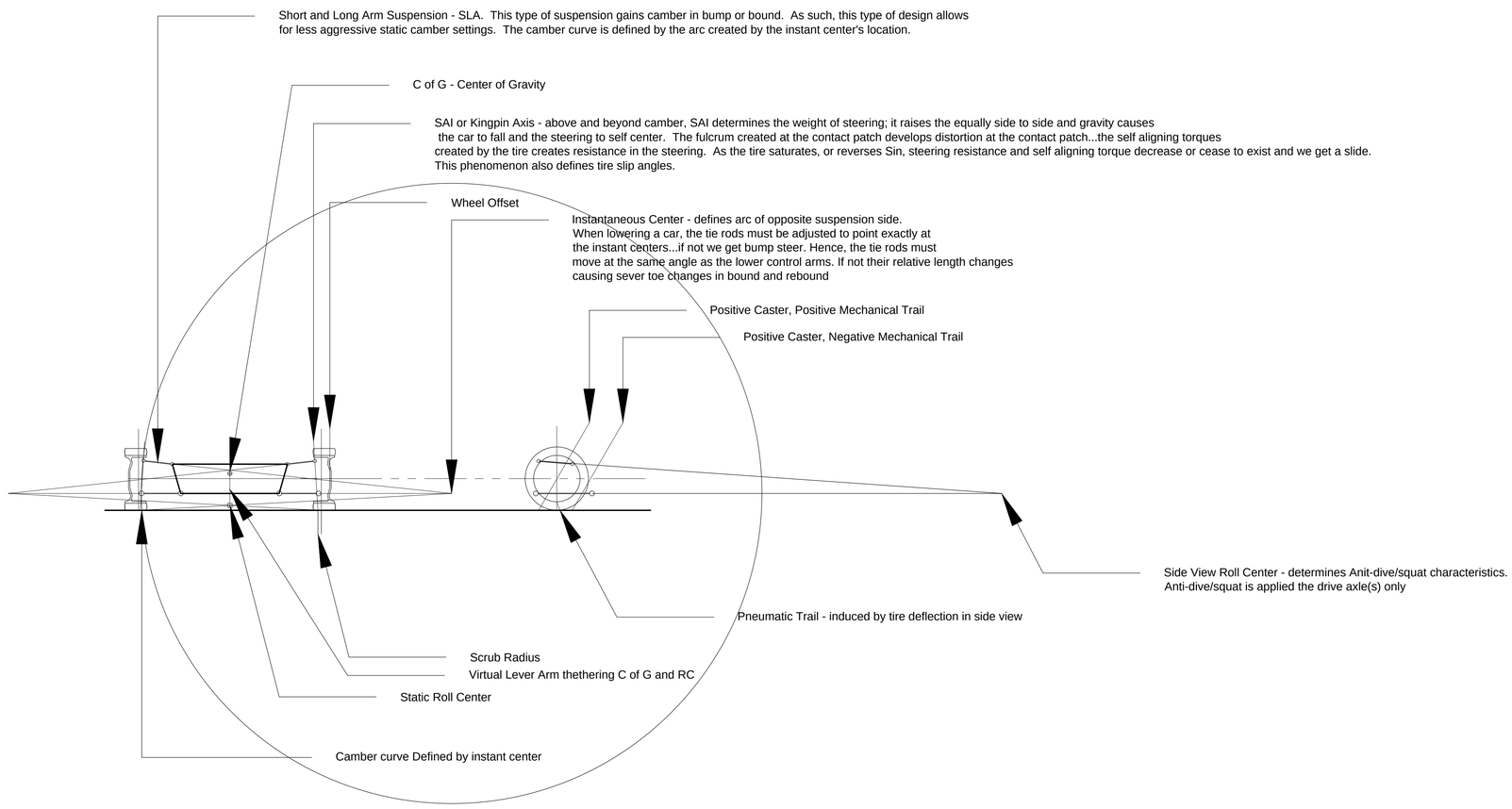
Short and Long Arm Suspension - SLA. This type of suspension gains camber in bump or bound. As such, this type of design allows for less aggressive static camber settings. The camber curve is defined by the arc created by the instant center's location.
C of G - Center of Gravity
SAI or Kingpin Axis - above and beyond camber, SAI determines the weight of steering; it raises the equally side to side and gravity causes the car to fall and the steering to self center. The fulcrum created at the contact patch develops distortion at the contact patch...the self aligning torques created by the tire creates resistance in the steering. As the tire saturates, or reverses Sin, steering resistance and self aligning torque decrease or cease to exist and we get a slide. This phenomenon also defines tire slip angles.
Wheel Offset
Instantaneous Center - defines arc of opposite suspension side. When lowering a car, the tie rods must be adjusted to point exactly at the instant centers...if not we get bump steer. Hence, the tie rods must move at the same angle as the lower control arms. If not their relative length changes causing sever toe changes in bound and rebound
Positive Caster, Positive Mechanical Trail
Positive Caster, Negative Mechanical Trail
Side View Roll Center - determines Anit-dive/squat characteristics. Anti-dive/squat is applied the drive axle(s) only
Pneumatic Trail - induced by tire deflection in side view
Scrub Radius
Virtual Lever Arm thethering C of G and RC
Static Roll Center
Camber curve Defined by instant center