Lateral acceleration

Lat G measures the force that the car withstands in curves.
It can be used to calculate a mass transfer at cornering
Mass transfer in kilos = M x H / W x G
With : M : car mass
H : height of the centre of gravity
W : wheelbase width
G : acceleration in g , positive on acceleration.

It allows to calculate the actual cornering radius : (calculate 1/R to avoid infinite values)
$1/R = G \times 9.81 / V^2$
With : R : cornering radius in meters
G : acceleration in G
V : car speed in m/sec

By comparing the signal of 1/R with the signal of the steering wheel angle, it is possible to detect under or over steering.